

LIBRARY PROVISION FOR UNDERGRADUATES :  
WITH SPECIFIC REFERENCE TO THREE LIBRARIES IN  
A SELECTED REGION OF SOUTH AFRICA

SUBMITTED IN FULFILMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
MASTER OF ARTS (LIBRARIANSHIP)  
AT THE  
UNIVERSITY OF CAPE TOWN  
UNDER THE SUPERVISION OF  
PROFESSOR J G KESTING

CARRYL MEGAN ALLARDICE

CAPE TOWN

1987

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

## ABSTRACT

The purpose of this thesis is to analyse library programmes, facilities and services for undergraduates at South African university libraries.

Black students who arrive at university encounter a library for the first time and find using it a bewildering experience. Thus libraries must become more aware of undergraduate needs and play an increasing role in academic support, concentrating their services on the undergraduate and particularly those from disadvantaged backgrounds. This concern for undergraduate education prompted an evaluation of library provision for undergraduates. The broad hypothesis being 'the better the facilities, the better the library services' and the concomitant provision for undergraduates. The thesis examines the literature commencing with an outline of general library facilities (accommodation, collection, staffing, and financial support), as well as determining the role of the university library, and examining established library standards. Library services are identified, with particular emphasis on user education. The literature survey concludes with an in-depth examination of the development of undergraduate libraries and the arguments both for and against such libraries. The scope of the investigation is limited to three university libraries in a contiguous region of South Africa, and data was gathered via a detailed structured questionnaire. The empirical survey focuses on library programmes and attempts to identify specific provision for undergraduates. The researcher concludes that user education is the key element

in library provision - that librarians must gear themselves for assisting undergraduates to use the library as an independent study facility, working with academic staff to promote the importance of library skills and concentrating on library provision for undergraduates.

## ACKNOWLEDGEMENTS

I would like to take this opportunity of expressing my appreciation to Miss M H van Deventer for allowing me leave to complete this investigation, and for the inspiration and example she sets. My sincere thanks to my supervisor, Professor J G Kesting, for his invaluable assistance, encouragement and kindness throughout the period of research. My special thanks too, to Michael for 'being there' and to my Mother for her love and unfailing support.

TABLE OF CONTENTS

		<u>Page</u>
SECTION A	INTRODUCTION	
CHAPTER 1	THE FIELD OF INVESTIGATION	1
1.1	Hypothesis	1
1.2	Aims and investigation methodology	7
1.3	The importance of the study	10
1.4	Limitations of the study	10
1.5	Definition of terms	11
SECTION B		
CHAPTER 2	UNIVERSITY LIBRARY FACILITIES	12
2.1	Overall goal	14
2.1.1	The role of the university library in its academic setting	14
2.1.1.1	Mission	18
2.1.1.2	Goals and objectives	19
2.1.1.3	Functions	25
2.1.2	Summary	30
2.2	Organizations of the university library	31
2.2.1	Library committee	32
2.2.2	Departmentalization	33
2.2.3	Change and planning	36
2.2.4	Centralization versus decentralization	37
2.2.4.1	Types of decentralized collections	46
2.2.4.1.1	Branch libraries	46
2.2.4.1.2	Subject divisional or sectional libraries	48
2.2.4.1.3	Departmental libraries	49
2.2.4.1.4	Class or seminar libraries	50

		vi
2.2.4.1.5	Institute libraries	51
2.2.5	Summary	51
2.3	Library accommodation	52
2.3.1	Location	53
2.3.2	Building design	55
2.3.3	Physical environment	60
2.3.4	Library space	63
2.3.4.1	Reader space	67
2.3.4.2	Collection space	68
2.3.4.3	Staff space	69
2.3.5	Special features	70
2.3.6	Summary	72
2.4	Collection development	72
2.4.1	Collection development policy	73
2.4.2	Selection	75
2.4.3	Evaluation	85
2.4.3.1	Circulation	86
2.4.3.1	Scrutinizing stock	89
2.4.3.3	Comparison with checklists or bibliographies	89
2.4.3.4	Measuring expenditure on library materials	91
2.4.3.4.1	Gross size	91
2.4.3.4.2	Acquisition rate	94
2.4.3.4.3	Student enrollment	95
2.4.4	Weeding	98
2.4.5	Summary	99
2.5	Staffing the university library	99
2.5.1	Professional staff	102

2.5.2	Non-professional staff	108
2.5.3	Staff size	109
2.5.4	The role of the librarian	110
2.5.5	Summary	114
<del>X</del> 2.6	Funding the university library	114
2.6.1	Funding adequacy	118
2.6.2	Funding formula	122
2.6.3	Funding South African university libraries	131
2.6.3.1	University library subsidies before 1953	131
2.6.3.2	University library subsidies before 1960	134
2.6.3.3	University library subsidies before 1973	138
2.6.3.4	University library subsidies before 1979	141
2.6.3.5	Introduction of SAPSE Funding	147
2.6.4	Summary	156
CHAPTER 3	UNIVERSITY LIBRARY STANDARDS	158
3.1	Introduction	158
3.2	International standards	160
3.3	Development of standards in the United States	161
3.3.1	ALA standards for university libraries	164
3.4	Standards for university libraries in Great Britain	168
3.5	Canadian university library standards	169
3.6	Standards for South African university libraries	170
3.7	Summary	170
<del>X</del> CHAPTER 4	UNIVERSITY LIBRARY SERVICES	174
4.1	Basis for service	176



4.2	The library user and misuse of the library	177
4.3	The library and student reading	180
4.4	Staffing reader services	184
4.5	Organization for service	188
4.5.1	Access	189
4.5.2	Hours of opening	189
4.5.3	Circulation	191
4.5.4	Catalogue	195
4.5.5	Reserve collection	198
4.5.6	Reference service	202
4.5.6.1	Student awareness of reference service	205
4.5.6.2	Personal assistance at the reference desk	210
4.5.7	User education	212
4.5.7.1	Defining user education	216
4.5.7.2	Goals and objectives of user education	218
4.5.7.3	Target population	219
4.5.7.4	User education needs of students	219
4.5.7.5	Instructional objectives	222
4.5.7.6	Library instruction programme	223
4.5.7.6.1	Library orientation	225
4.5.7.6.1.1	Types of library orientation	227
4.5.7.6.1.2	Lecture	229
4.5.7.6.1.3	Film	230
4.5.7.6.1.4	Videotape	230
4.5.7.6.1.5	Slide/Tape	231
4.5.7.6.1.6	Guided tour	232
4.5.7.6.1.7	Audiotaped tour	233

4.5.7.6.1.8	Self-guided tour	234
4.5.7.6.2	Guides to the library	234
4.5.7.6.3	Basic library skills	238
4.5.7.6.4	Course-related instruction	240
4.5.7.7	Aids to instruction	246
4.5.7.8	The librarian's role as teacher	248
4.5.7.9	Liaison between academic and library staff	252
4.5.7.10	Evaluation of user education	258
4.6	User studies	260
4.7	Information retrieval and information services	264
4.7.1	Information retrieval in South Africa	270
4.7.2	Information retrieval to undergraduates	271
4.7.3	Inter-library loan	272
4.8	Computer technology service	276
4.9	Microform service	277
4.10	Photocopying service	279
4.11	Summary	281
CHAPTER 5	UNDERGRADUATE LIBRARIES	285
X 5.1	Characteristics of the undergraduate library	285
✓ 5.2	Definitions of the undergraduate library	289
5.3	Historical development of the undergraduate library	291
5.3.1	Historical precedents of library service for undergraduates in the United States and Great Britain	292
5.3.2	History of some representative	

	undergraduate libraries in the United States	297
5.3.2.1	The Lamont Library at Harvard University	297
5.3.2.2	The Undergraduate Library at the University of Michigan	306
5.3.2.3	The Undergraduate Library at the University of South Carolina	310
5.3.3	The period of rapid growth of undergraduate libraries in the United States	312
5.3.4	Undergraduate libraries in Great Britain	319
5.4	Evaluation of the undergraduate library concept	323
5.4.1	Evaluation of the facilities offered by undergraduate libraries	332
5.4.2	Evaluation of the services offered by undergraduate libraries	339
5.5	Summary	343
SECTION C	EMPIRICAL SURVEY	
CHAPTER 6	METHODOLOGY	347
6.1	Introduction	347
6.2	Scientific enquiry theory	348
6.2.1	Theory	350
6.2.2	Hypothesis	352
6.2.3	Variables	354
6.2.3.1	Independent variables	355
6.2.3.2	Dependent variables	355
6.2.3.3	Controlled variables	355

6.3	Research design	356
6.4	Data	357
6.5	Data-collection	358
6.5.1	Observation	358
6.5.2	Survey research	359
6.5.2.1	Survey techniques	361
6.5.2.1.1	Interviews	362
6.5.2.1.2	Questionnaires	364
6.5.2.1.3	Scaling techniques	367
6.5.2.2	Pilot survey	367
6.5.2.3	Population	368
6.5.2.4	Sampling	370
6.5.3	Nonreactive techniques	371
6.6	Choice of research methodology	371
6.7	Conduct of the survey	372
6.7.1	Population used in the study	373
6.7.2	Profiles of the universities	373
6.7.2.1	University A	376
6.7.2.2	University B	376
6.7.2.3	University C	377
6.7.3	Variables of the study	377
6.7.3.1	Date of establishment	378
6.7.3.2	Student enrollment	379
6.7.3.3	Language of instruction	380
6.7.3.4	Geographical location	382
6.7.3.5	Government department funding the institution	382
6.7.3.6	Ethnic composition	383
6.7.3.7	Residential facilities	383

6.7.3.8	Range of disciplines taught	384
6.7.3.9	Relative predominance of undergraduate/ post-graduate students	385
6.8	Questionnaire design	386
6.9	Summary	387
CHAPTER 7	ANALYSIS OF THE DATA	388
7.1	Introduction	388
7.2	Distribution and response	390
7.3	Data processing	391
7.4	Abbreviations	392
7.5	Survey data	392
7.5.1	Finance	393
7.5.1.1	Question : What was your total library budget in the last 5 years?	393
7.5.1.1.2	Question : What percentage of your total library budget was spent on the purchase of library material in the last 5 years?	394
7.5.1.2	Summary	397
7.5.2	Staff	398
7.5.2.1	Question : Number of FTE professional positions budgeted for on the staffing establishment, including those unfilled, over last 5 years.	400
7.5.2.1.1	Question : Number of FTE professional positions filled on the staffing establishment over the last 5 years.	400
7.5.2.2	Question : Number of FTE para-professional library assistant positions budgeted for on the staffing establishment, including those	

	unfilled, over last 5 years.	401
7.5.2.2.1	Question : Number of FTE para-professional library assistant positions filled on the staffing establishment over last 5 years.	402
7.5.2.3	Question : Number of FTE clerical positions budgeted for on the staffing establishment, including those unfilled, over the last 5 years.	403
7.5.2.3.1	Question : Number of FTE clerical positions filled on the staffing establishment over last 5 years.	403
7.5.2.3.2	Summary	404
7.5.2.4	Question : How many members of FTE staff are employed in Reader Services in your library?	406
7.5.2.5	Question : how many members of FTE staff are employed in Technical Services in your library?	407
7.5.2.6	Conclusions	407
7.5.3	Scope and content of the collection	409
7.5.3.1	Question : What is the total size of your collection (as at the end of 1983)?	413
7.5.3.2	Question : What was the total no. of items held in your reserve book collection (during 1983)?	415
7.5.3.3	Question : Outline briefly the collection development procedure for the selection of library material for students and staff, indicating the respective roles of library	

- staff, academic staff, students and other users, if any, in recommending and ultimately selecting such material. 416
- 7.5.3.3.1 Question : Does your library have a specific policy for collection development of material for undergraduate use (excluding the provision of multiple copies)? 417
- 7.5.3.3.1.1 Question : If yes, please elaborate. 417
- 7.5.3.3.1.2 Question : Would you consider it desirable to use as the basis for collection development one or more of the recognised lists recommended for inclusion in an undergraduate library's collection development policy? 418
- 7.5.3.4 Question : What procedures are followed in putting an item on reserve including its selection? 419
- 7.5.3.5 Question : Does your library have a policy of purchasing multiple/duplicate copies of books only for undergraduate use? 420
- 7.5.3.5.1 Question : If yes, do you have a specific formula? 420
- 7.5.3.5.2 Question : If no, please comment if you so wish. 421
- 7.5.3.6 Question : Does your library have a policy of evaluating and weeding your collection systematically and on a continuing basis? 422
- 7.5.3.6.1 Question : If yes, please specify your procedures. 422
- 7.5.3.7 Summary 423

7.5.4	Accommodation	424
7.5.4.1	Question : Total seating capacity of your library?	425
7.5.4.1.1	Question : Please elaborate if you so wish.	425
7.5.4.2	Question : Do you make specific provision for seating undergraduate students in your reserved book collection?	426
7.5.4.3	Question : Is the reserved book collection located within the Main library building?	427
7.5.4.3.1	Question : If yes, is it located in a separate room?	427
7.5.4.3.2	Question : If no, please specify where it is housed.	428
7.5.4.4	Question : When planning your library's facilities did you take into account that undergraduate students may use the library also for study purposes?	428
7.5.4.4.1	Question : Please elaborate if you wish.	429
7.5.4.5	Question : Does your library building house the entire collection of library materials (see question 3.1), i.e. is the collection completely centralised?	430
7.5.4.5.1	Question : If no, where else are library materials housed?	430
7.5.4.6	Summary	431
7.5.5	Reader Services	432
7.5.5.1	Question : What are the regulations governing use of your library by undergraduate	



	students?	433
7.5.5.2	Question : Please give a brief synopsis of your objectives in providing library services to undergraduate students.	434
7.5.5.3	Question : Do you provide a handbook or printed guide to the Library for the use of undergraduate students?	435
7.5.5.3.1	Question : If yes, please attach copy of the guide to the library.	436
7.5.5.4	Question : Please specify the Main Library's total number of hour of opening per week.	436
7.5.5.4.1	Question : Please specify the Main Library's total number of hours of opening in the evening after 6pm per week.	437
7.5.5.4.2	Question : If your reserved book collection is open at different times from the Main Library's hours of opening, please specify the time schedule for its times of access.	438
7.5.5.5	Question : Does your library offer orientation in the use of your university library?	438
7.5.5.5.1	Question : please outline your current library orientation policy and procedures for undergraduate students.	439
7.5.5.5.1.2	Question : Which of the following does the library orientation consist of?	440
7.5.5.5.1.3	Question : If an orientation lecture is given, what information does it contain? Please give a brief synopsis.	441

- 7.5.5.5.1.4 Question : Which members of staff provide such library orientation? 441
- 7.5.5.5.1.5 Question : Are there any follow-up talks on use of the library given to undergraduate students during the rest of their undergraduate years? 442
- 7.5.5.5.1.6 Question : Do you consider your current library orientation practices adequate? 443
- 7.5.5.5.1.6.1 Question : If no, please comment if so desired... 443
- 7.5.5.5.1.7 Question : If you have a branch library off-campus, what library orientation is given to undergraduates registered with that branch, when they visit the main library? 444
- 7.5.5.6 Question : Please give a rough estimate of what percentage of reference questions received from your library's users, are asked by undergraduates, as opposed to other users. 445
- 7.5.5.6.1 Question : Please give a rough estimate of the percentage of reference questions asked by undergraduates of a brief informational and directional nature in each of the two categories below. 445
- 7.5.5.7 Question : Please state number of items circulated to all users in last 5 years (if statistics are available). 446
- 7.5.5.7.1 Question : Please indicate the number of loan transactions in the reserved book collection

	in the last 5 years (if statistics are available).	447
7.5.5.8	Question : Which of the following are available for use by undergraduate students in your library?	448
7.5.5.9	Summary	449
7.5.6	General	451
7.5.6.1	Question : In your opinion is the overall service offered to undergraduates by your university library adequate?	451
7.5.6.2	Question : If any pronounced fluctuations are reflected in the statistics you have supplied for the last 5 years please explain reasons for such fluctuations.	452
7.5.6.3	Question : If you had adequate funding to provide ideal services to all users, what new services and facilities, etc. would you consider introducing with a view to improving and enhancing the existing library service to undergraduates at your library?	454
7.5.6.4	Question : Could you identify any positive or negative aspects in providing a specialized service geared to the needs of undergraduates in the form of a separately housed undergraduate library?	455
7.5.6.5	Question : Are there any general comments which you would like to add concerning the needs and requirements of undergraduates?	456
7.5.7	Summary of findings of the Empirical	

## Survey

457

## SECTION D CONCLUSIONS

## CHAPTER 8 CONCLUSIONS 463

## 8.1 Review of the hypothesis 463

## 8.2 Summary of conclusions 464

## 8.3 Implications for the future 476

## SECTION E ANNEXURES

## APPENDIX I Questionnaire

## APPENDIX II Bibliography

## SECTION 1 : INTRODUCTION

### CHAPTER 1 : THE FIELD OF INVESTIGATION

#### 1.1 HYPOTHESIS

The purpose of this thesis is to analyse library programmes, facilities and services for undergraduate students at South African university libraries, and to provide evaluative information about their library policy in relation to undergraduates. In examining the provisions for undergraduates made by these university libraries, an attempt will be made to determine the extent to which these libraries meet established international standards. The thesis will focus on both the strong and the weak elements of library programmes for undergraduates, and try to identify any specific provision made by the South African university library for ensuring the success of its activities with regard to undergraduates.

The study will devote considerable attention to examining the function of the university library and the role that it plays in the education of undergraduates. University libraries have traditionally been primarily concerned with the library's role in the educational process, and have paid much attention to the various elements that have helped determine that role. This investigation will try to establish the extent to which the library serves that role in respect of undergraduates.

The scope of this investigation is limited to three university

libraries in a specific region of South Africa (although one of these institutions is nominally no longer within the Republic of South Africa, it was nevertheless invited to participate in this survey). It will seek to determine the funding of these institutions, the scope and content of their collection, their administrative organization, the number of staff members serving the collection, the services provided, the instruction in use of the collection, and their projections for the future in terms of undergraduate provision. In order to compare an individual library to other libraries in institutions which are of similar size or characteristics, the present study utilizes the evaluative procedures of comparing them to each other and measuring them against the standards of the American Library Association.

As university libraries struggle to increase their educational effectiveness, they constantly re-examine their roles and redefine their mission in terms of their responsibility in preparing their students for professions and in meeting other needs imposed on them by society. Of fundamental importance to this self-examination is an analysis of the library programme which is provided at each institution, and the role the library plays as instructor in its own use. This raises particularly the question of provision for undergraduate students. Since in reality, are not most South African universities mainly concerned with teaching undergraduates, and should the South African university library not have as its first priority the support of this learning process by making deliberate provision for undergraduate needs?

In South Africa, where we have a declining white student enrollment (Lor, 1981 : 82) and a steadily increasing black student enrollment (caused in the main by the population growth and the rising percentage of black matriculants who elect to go to university) projections of university student numbers in South Africa indicate that total undergraduate enrollment in 2000 will be 1 353 439. In 1981, the Human Sciences Research Council (HSRC) Main Committee for the Investigation into Education Work committee, on Education Financing (commonly referred to as the De Lange report), projected an enrollment in South African universities of 202 517 by 1985, but in fact by 1985, over 221 767 students were registered for courses in South African universities (SAIRR Survey, 1985 : 401). The target of 1 353 439 by the year 2000 is likely to be, once again, a conservative one. with<sup>a</sup> projected 81% black student enrollment. The future switch in emphasis from the white to the black undergraduate is clearly demonstrated by the fact that in 1979-80, 20% of student enrollment was by black students; by 1990 it is projected that black students will constitute 68% of student enrollment and by 2010 an estimated 86% of the student body (personal communication, JHG de Villiers, 1987). This being the case, the major preoccupation of the South African university is certain to be the undergraduate student and his needs for a long time to come, and particularly the black undergraduate. It is worth noting here, to contrast the South African with the United States university scene, where student enrollment is on the decrease and where the highest peak in student enrollment was experienced in the 1960s when the establishment of undergraduate libraries reached its zenith.

In practice, most of the black first year students arriving at university fail to realize that university learning is different - that in higher education lecturers teach from a research based syllabus rather than a nationally laid-down curriculum (Mann (1976 : 2) The present education system in South Africa has resulted in certain unfortunate conditioning in black schools. This results in black first year students being :

- a. 'weak in reading, listening comprehension, writing (including note taking) and speaking in English';
- b. 'used to being taught, while at university, students are given the opportunity to learn';
- c. 'used to being spoon-fed, whereas the undergraduate must realize that the organization of his work and the responsibility for covering the syllabus are his and his alone (lecturers are there to help him but not to usurp his own functions)';
- d. 'unused to class participation as opposed to their previously passive existence in the school classroom';
- e. 'very slow workers, enhanced by slow reading';
- f. 'unwilling or unable to find out for themselves or to use their own initiative';
- g. 'unwilling or unable to read in English';
- h. 'unwilling or unable to remember instructions and venues from day to day'; and
- i. 'incapable of recognizing the need for being on time or for regularity of attendance' (Allardice, 1986 : 1-2).

The tendency is therefore, for black students to arrive at university with varied skills. Although students may fail or



perform poorly due to a variety of causes, such as poor study habits, family responsibilities and emotional problems, a major factor in student performance is language proficiency (Olagoke, 1975 : 369-80). Language proficiency involves efficient reading, and students whose reading ability is poor will be reluctant to read more than the prescribed minimum and will tend to rely on recommended reading only. Research has shown that a rich background of experience in reading, through a lot of extra-curricular reading, correlates with a superior reading ability (McLarty, 1985 : 36-44). University librarians have to bear in mind that black undergraduates do not have the opportunities of their white counterparts to use public libraries for extra-curricular reading except where a municipality has 'opened' up its collection for black use, or in rare instances has depots in black urban areas. Nevertheless, the large majority of black undergraduates have been denied the privileges as schoolchildren of borrowing fiction and non-fiction books from libraries, and there has been a tendency for libraries to ignore the challenge of these undergraduates. Thus the provision of extra-curricular reading material by university libraries would greatly help students to improve their reading skills.

It is indeed true that many of these black students encounter a library for the first time when they attend university, and for them in particular, using the university library can be a bewildering experience. With this in mind, it is becoming increasingly important that South African librarians become more aware of undergraduate student needs and services. As Wilkinson has pointed out, the 1950s saw the discussion of "library

services to undergraduates ... [and by] the 1970s, the literature usually concerned services for undergraduate students. It is not too much to read into these prepositions a change in attitude from paternalism to service" (1978 : xiv). He expresses the hope that library service in the 1980s will be "librarians with students : undergraduate librarians in touch with students and truly working with them - students learning from librarians and librarians learning from students" (Wilkinson, 1978 : xiv).

The South African university library must play an ever increasing role in academic support by concentrating their services on the undergraduate and particularly those from disadvantaged backgrounds, in order to enable such students to 'bridge the gap' between school and university (Allardice, 1986 : 1; Switzer, 1987 : 8). It is therefore apparent that university libraries must provide the facilities and services that will encourage the undergraduate to read widely, thus improving his reading skills and freeing him from depending on his textbook and lecturer's prescribed readings, by being instructed in use of the library to independently attempt to consult more research-based texts.

It is this concern for undergraduate education which has prompted this evaluation of library provision for undergraduates. The working hypothesis underlying this thesis is a fairly broad one, that 'the better the library facilities, the better the library services' and the concomitant provision for undergraduates.

## 1.2 AIMS AND INVESTIGATION METHODOLOGY

In order to test the hypothesis, the thesis will firstly examine the literature of the problem. This conceptual component commences with a chapter outlining the general library facilities provided for undergraduate students. This includes determining the role of the university library and its overall aim. In order to place the university library in its proper perspective, it was necessary to give an overview of the more important facilities - library accommodation and the book collection amongst others - and examine the amount of financial support provided. The next chapter examines the established library standards that university libraries should be meeting.

This chapter is followed by an examination of university library services for undergraduates with particular emphasis placed on the provision within these services for user education. The study identified the bibliographic instruction which should be provided by university libraries according to the information available, and determined the role such libraries should play in providing support for curricular activities.

The literature survey concludes with a systematic study of the development of undergraduate libraries. Factors which contributed to the growth of such undergraduate libraries will be identified and analysed. It is readily conceded that the whole question of separate library facilities for undergraduate students is a contentious one, with vigorous debate both for and against continuing to appear in scholarly journals (Person, 1982 : 4-13;

Ugonna, 1983 : 126-35; Wingate, 1978 : 29-33). Although consideration will be given to the history and theory of this issue, ultimately it will be argued that the utility of a separate undergraduate library facility is determined by specific local conditions - especially the particular needs of the students - and not the application of abstract formula which juggle with staff/student or student/bookstock ratios.

In all three chapters the pertinent literature examined has been mainly American and British - largely because the South African educational system is modelled most closely on these two countries. However, despite attempts made by the investigator to review the literature on a more global basis, and in particular to obtain information on 'Third World' countries for purposes of comparison, very little would seem to be available specifically concerning undergraduates. It was therefore necessary to deal with each aspect of the literature survey quite exhaustively and where pertinent, to highlight the aspects of provision for undergraduates. The researcher is aware of the length of the thesis but has attempted to be as thorough as possible in dealing with this topic.

Throughout the literature survey various terminology which are uniquely American, were encountered. Terms such as freshman, graduate and faculty have not been used by the researcher, who has preferred the British and South African equivalents - viz. first year, postgraduate and academic staff. Where such words have occurred in the quotations cited by the researcher, these terms have been left in their original form. It is also because

of the largely American bias in the literature survey, that the standards which apply to American university libraries (cf 3.3.1) have been referred to systematically throughout by the researcher. Cognizance has been taken of the fact that these standards apply to universities which are generally much larger than those in South Africa. Nevertheless, these standards are a useful guide and serve as an evaluative measure.

The second half of the thesis is based upon data gathered via a structured questionnaire. The detailed six-part questionnaire, accompanied by a covering letter was mailed to the university librarians at each of the three institutions. It was decided to use this method as it is useful for providing precise and pertinent information about existing situations; the data gathered can be applied in comparison studies and in the identification of trends. It focused on the strong and weak elements of library programmes at three South African university libraries, and attempted to identify the special services which South African university libraries should be providing over and above those generally provided. By putting into perspective the traditional function of the university library, as well as the conditions at the three institutions which prevailed when the study was conducted, the survey attempted to examine the library in terms of the provision for undergraduates.

The thesis concludes with a summary of findings presented in terms of the findings of the literature and empirical surveys.

### 1.3 THE IMPORTANCE OF THE STUDY

It is hoped that the data and analysis offered in this thesis will provide a useful source of information to facilitate further research at a higher or a national level to assist university administrators responsible for planning and policy decisions affecting library facilities and services, and to enable developments in South African university libraries to be assessed in the context of recent theory and practice world-wide.

### 1.4 LIMITATIONS OF THE STUDY

The most notable limitation of this investigation was the lack of instrumentation to measure library provision. The questionnaire administered to the three libraries in the specific region did not measure the inputs and outputs of library performance except in as much as these were measured against library standards. An in-depth study would have been required amongst the students and staff of all three institutions in order for the researcher to incisively measure the effects of library provision. A survey of such a magnitude would have been logistically impossible for the researcher to conduct, and also unmanageable. It is therefore recommended that as a follow-up study the effects of library provision on the university be established.

The collected and interpreted data are concentrated during the period 1979 through to 1983. Since the study was completed many new developments have occurred in the three institutions and in South African university libraries in general. Detailed accounts

of these developments have been omitted from this investigation, however examples of such developments are reported where it is deemed necessary.

In view of the fact that it took a longer time to complete the thesis than anticipated, the material contained in the empirical survey may have become a bit dated. When compiling the data after this protracted period, it was suggested that a more up-to-date survey might have yielded more recent information. The researcher considered repeating the survey for the years 1984 through to 1986. However, this period has been marked by a great state of flux in libraries and much uncertainty about their financial positions. On balance it was decided that it was preferable to retain the survey as it stands, especially as the financial upheavals since 1985 (when periodical subscription cost increased by 300% in one year), have left university libraries in a state of flux and the position is still far from stable. On reflection, the period from 1979 to 1983 was relatively stable.

### 1.5 DEFINITION OF TERMS

Undergraduate : An enrolled student who has not completed his bachelor's degree.

Postgraduate : An enrolled student who has not completed his initial degree.

Academic : A member of the teaching staff of the university.

Library management : The University librarian and his deputy, or other senior library staff who are involved in the day-to-day management of the university library.

## SECTION B : LITERATURE SURVEY

### CHAPTER 2 : UNIVERSITY LIBRARY FACILITIES

The various facets of university library facilities provided for undergraduates, are dealt with in this section, viz. organization, library accommodation, collection development, staffing and finance. All university library facilities are influenced by the nature of the academic society, the concomitant needs of users as perceived by librarians, and by such factors as changes in media, information retrieval, communications, technology, fluctuations in funding, and a need to meet the essential requirements of collection development. Indeed, university libraries "must always be flexible and able to adjust easily to changing circumstances" (Harris, 1978 : 78).

The rate of change in university libraries is accelerating every year, requiring a need for a dynamic reaction to such change. This change, notes Naisbitt, "is occurring so rapidly that there is no time to react; instead we must anticipate the future" (1984, cited in Montanelli & Stenstrom, 1986 : 484). At the same time, Martell calls for creative responses to the dramatic changes we are encountering in the 'knowledge society' (1985 : 293-94).

The past twenty years have seen massive changes in the operation of university libraries - changing organizational patterns, changes in library job skills, major changes in the methods of publishing and in the formats of publication. A variety of new technologies - automation, telecommunications, computer output



microforms, videodisk, videotex, CD-ROM - continue to have an enormous impact on libraries. These new technologies have also encouraged the development of "truly effective library and information networks" (Beckman, 1983 : 281). We have moved, Gapen contends, into "an information society" (1984 : 353). While it is necessary for libraries to deal with change, they must anticipate the requirements which campuses will place on them in the future.

In recent decades, academic librarians have managed to maintain the changing pace necessary to provide the essential resources which these times demand. The key to that adaptability has been in "their ability to discern trends of importance before they occur" (Berry, 1979 : 104). The observation that university libraries on the whole have always tended to respond effectively to changes in the higher education environment, is pointed out by Lynch who claims that they generally "display an extraordinary sensitivity to conditions around them and a remarkable ability to adapt and change over time" (1978 : 10).

The challenges for academic libraries may be accelerating at a greater pace and degree of intensity. Moss, for example, has noted more than two decades ago (i.e. during a period of relative affluence) that " Changing objectives of the university, or at least changing methods of achieving these, have offered the library an increasingly significant place in the education of the undergraduate" (1966 : 99). This view may still be considered valid for our time as well as the foreseeable future.

## 2.1 OVERALL AIM

The facilities of the university library as a resource centre should enhance service to undergraduate students. Indeed, the mere environment of the university library should encourage the use of the library and its resources. The university library should attempt to create a stimulating, pleasant climate that permits students "to isolate themselves and at the same time to be involved, allowing them to orientate their studies in a many-sided relationship with the aids (catalogues, bibliographies, etc.)" (Stoica, 1977 : 363-7).

The university library should be well organized and well maintained to satisfy the needs of the academic community. Consequently, the present investigation, which is aimed at ~~X~~ library provision for undergraduate students (cf 1.1), will examine university library facilities specifically with this category of user in mind. There can be little question that the quality (effectiveness/ethics) of university library facilities are of vital importance to the undergraduate. Even if the disciplines of reading and reference are not basic to a rounded education, it is common cause that no lecturer can present a course so comprehensively that his students are able to achieve full (or adequate) mastery of it without recourse to the university library.

### 2.1.1 The role of the university library in its academic setting

As the university library is by definition one of the most

indispensable ~~academic~~ components of a university, its purpose must be the same as the university's. This assumption is supported by Lynch and Seibert who emphasize that "Academic libraries are integral parts of the institutions they serve" (1980 : 127). Such libraries are the "essential resource of the university" and "essential to the mission" of the university (Lynch, 1978 : 11) and therefore rank "next to the classroom as an important learning setting" (Campbell & Shlechter, 1979 : 26). The university library is frequently referred to in the literature as "the heart of the university" (Allen, 1971 : 24; Buck, 1964 : 9; Dougherty & Blomquist, 1974 : vii), and Lyman goes so far as to say that "a healthy university cannot be without a healthy library" (1971 : 3).

The importance that the university library assumes in the context of the university is deemed so important by Brough as to be "the first necessity of the institution" (1953 : 23). Indeed, Buck X considers that "you cannot have a quality education without a quality library" (1964 : 10).

This importance of the library is best summarized by the classical and authoritative statement made in 1921 by the British University Grants Committee (UGC) :

The character and efficiency of a university may be gauged by its treatment of its central organ - the library (Cited in UGC, 1967 : 9).

The place of the library in the university has been further enhanced since the post World War II years by the increasing

emphasis on independent study. Boshoff sees this as "die vernaamste taak van die universiteit is om studente te leer om hom self te leer - selfonderrig kan slegs met hulp van boeke (biblioteke) geskied" (1967 : 35). Boshoff goes on to charge that independent study must be extended to undergraduate students "Hierdie proses van 'leer om te leer' moet op voorgraadse vlak plaasvind" (1967 : 35), a conviction endorsed by Govan, who observed that "More independent study by undergraduates seems inevitable" (1962 : 467). These statements all support Jolley's even earlier view that:

... the real task of the librarian which is also one of the main tasks of the university is to train the student to train himself (1956 : 139).

This vital role that the library plays in the training of students - with the instructional programme - can only be achieved by merging the academic and library staff and "by emphasizing student needs" (Allen, 1971 : 25).

The role of the university library as educator raises particularly the question of provision for undergraduate students. This is an area of university librarianship which has perhaps seen the most change in recent years. Libraries have had "to adapt to the move from teacher-centered to student-centered learning with the implications this has brought for the provision of ... facilities and student guidance" (Revill, 1981 : 105). Bryan in his appraisal of university libraries in Great Britain noted that "librarians were keenly aware of the complex nature of their responsibilities" (1966 : 26).

Conventionally the university library's role is to support the curriculum. It has always been presumed to make available course-related material, as well as material that supplements textbook readings, such as reference works and journal articles. It may also be expected to inculcate in the student an approach to self-education to 'fill in the gaps' of the curriculum, or to serve as an instrument for use in independent study. However, the fundamental assumption that the role of the university library is educational remains beyond dispute (Gelfand, 1968 : 28; Lynch & Seibert, 1980 : 127; Revill, 1981 : 114; Thairu, 1976 : 32)

Another major role of the library in university education is that of promoting reading. Especially in rural areas where students have no opportunity to use a library before they get to university, there is a need to promote reading at this level (Thairu, 1976 : 33). This view is echoed by Ifidon, who cautions that university libraries should not be "unmindful of the rural and poverty-stricken environment within which they operate" (1978 : 50).

However, the role of the library in academic situations is not always clearly determined or implemented. Kroll believes that the university library is suffering from "nebulitis" contending that:

... its role is uncertain, its status is confused, its personnel feel put upon, discriminated against, and, in many places, vague about where they fit into the collegiate environment (1961 : 3).

This confusion, Kroll insists, can be attributed to the overbureaucratization and aimless expansion that has

characterized higher education since the post World War II years - trends which in turn have had their own effect on university libraries. Nevertheless, the role of the library was changing during the affluent 1960s, just as it is changing during the 'penurious' 1980s. White believes that it is "precisely during periods of retrenchment that innovation and planned change are most essential" (1985 : 269). The term 'role' therefore implies "an intellectual commitment, an involvement in planning, and an active interest in singly or cooperatively addressing campus needs" (Longee, 1985 : 271). Thus the critical task facing librarians is in defining the future role of the university library, and broadening the library's involvement in campus activities. Perhaps the most encouraging perspective on the role of the university library comes from Gelfand, who states that the library "should not be operated as a mere storehouse of books attached to a reading-room, but as a dynamic instrument of education" (1971 : 24-5).

#### 2.1.1.1 Mission

What is the mission of the university library? According to Buckland "the terms for describing what one is seeking to achieve are inconsistently used : mission, objective, goal, target, aim ... . The best ... is to specify explicitly the sense in which one is using each term and not to assume that others will adopt the same definitions" (1983 : 125). He defines a mission statement as "a broad definition of what business the library is in". Another definition is offered by Chiang who defines the library mission as follows :

At its broadest level, the mission of an academic library can be stated quite simply : an academic library should provide access to the information necessary for the teaching and research activities of the university it serves (1985 : 273).

A mission statement implies a generally acceptable definition of the role of the library, for example - to meet the information requirements of the whole university community. More and more libraries are defining their primary mission as "providing access to information needed by clients", with "core library programs ... viewed as the means for accomplishing this mission" (Webster, 1977 : 22).

For the purposes of this investigation the primary mission of a university library will be presumed to be - the provision of the materials and services required to meet the information and research needs of the staff and students of the university it serves.

#### 2.1.1.2 Goals and Objectives

"In order to articulate day-to-day work with the mission statement, it is convenient to spell out ... [the objectives] ... the library attempts ... in pursuit of its mission" (Buckland, 1983 : 126).

The objectives of a library proposed by Malan "lie between aims and functions" 1978 : 23). Malan succinctly clarifies the difference between the terms - aim, objective and function - as

follows :

... an aim is the end to which an action is directed, whereas an objective is the mark that has to be reached on the way to the realization of the aim. Tasks and functions are the activities or actions directed at the objective to realize the aim, and not the other way round (1978 : 23).

Since the term 'aim' is broadly synonymous with the term goal, the latter will be used in preference as it is considered more 'up-to-date' (Buckland, 1983 : 127), and as Malan points out "many authors ... speak of goals ... . To this there can be no objection for as long as the use of the terms is clarified and the choice is subsequently consistently applied" (Malan, 1978 : 27). Few university libraries define their goals and objectives with any precision. The reason for this, according to Churchill, is that "as a primary supporter of academic programs the library is not free to set its own goals and objectives : it must wait for the ... [university] it supports to establish ... goals, objectives and academic policies" (1975 : 21). Lynch, however, cautions that an excessively subservient - and hence a passive-approach to the formulation of the objectives of the university library could well jeopardise this sense of direction, and arguing that "without carefully defined goals and objectives an institution cannot evaluate its performance, allocate its resources wisely, plan for the future, motivate its members, or justify its existence" (1978 : 13).

However, the broad goal of the university library should not be confused with its objectives. In order to clarify this distinction between the two terms Fjalbrant defines a goal as



follows :

... to express broad, general statements of purpose, whereas the term 'objective' will be used to express specific short-term aims, in agreement with the main goals (1977 :201).

The goal of the university library is difficult to define but Hamel, in a paper delivered at the sixth meeting of International Association of Technological University Libraries (IATUL) acknowledged that :

We used to speak about a library as a collection, but nowadays it is thought of as a human institution in the sense of an organised social group, i.e. a group with a particular goal and approximate means to reach that goal (1976 : 28).

Turning to library objectives, those proposed by Malan, are defined as :

- a. 'Education. To foster and provide means for self-development of the individual/group at whatever stage of education, closing the gap between the individual and recorded knowledge';
- b. 'Information. To bring to the individual/group accurate information quickly and in depth, particularly on topics of current concern';
- c. 'Culture. To be one of the principal centres of cultural life and promote a keen participation, enjoyment and appreciation of all the arts'; and
- d. 'Leisure. To play a part in encouraging the positive use of leisure and providing material for change and relaxation' (1978 : 32).

Sales criticises Malan's hierarchical structure in its "application of these terms to all types of libraries" (1981 : 4). However, in the investigation of library provision for undergraduates, these objectives are entirely appropriate. The educational objective in the context of the university library is foremost, since "the university focuses on the student and researcher ... [and] a more formal form of education" (Malan, 1978 : 23). The provision of information emphasizes "the educational purpose to a greater or lesser degree in accordance with the type of service" (Malan, 1978 : 23). The subsidiary objectives of culture - "aesthetic appreciation and enculturation" - and leisure - (recreation) - are equally important in a university library, despite the fact that Malan sees recreation as "an aim only in the public library" (1978 : 24). The inclusion of extra-curricular reading material in university libraries (cf 4.3) on a wider scale than before, would accommodate the inclusion of leisure/recreation as an objective of a university library.

In an attempt at identifying each of the basic objectives of a university library in precise terms, Webster suggests that they should encompass the following specific functions :

- a. 'providing physical facilities';
- b. 'providing access to documents within the library';
- c. 'providing access to documents in other libraries';
- d. 'providing aids in identifying and locating documents and information promoting library use'; and
- e. 'planning, administration and support' (1977 : 22).

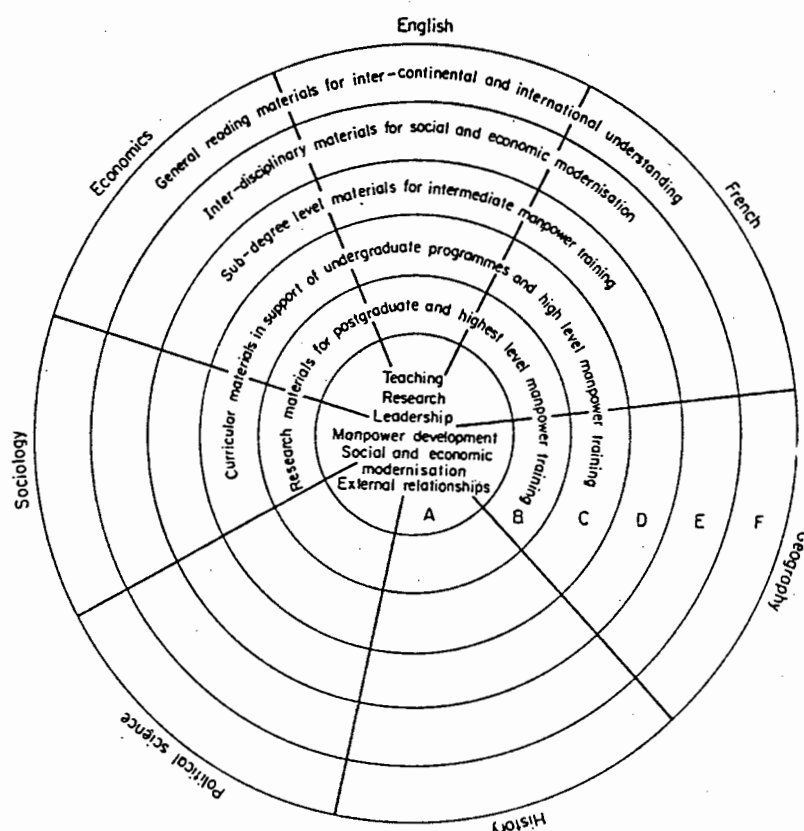
Buckland's list of objectives is more enlarged in scope and detail, viz. :

- a. 'to assess the informational requirements of the university community on a continuing basis by formal and informal interaction with all other elements of the university community';
- b. 'to select from available information that portion most applicable to the requirements of the university community';
- c. 'to acquire, organize, and arrange these informational resources in a manner and in a physical setting most conducive to their use';
- d. 'to interpret and publicize an additional range of informational and educative services in order to increase the benefits of the library to all members of the university community';
- e. 'to make available, interpret, and publicize an additional range of informational resources and services by active collaboration with other institutions through interlibrary loan, information networks, and cooperative arrangements';
- f. 'to study the operations and services provided by the library to assure effective use of available resources';
- g. 'to provide an environment in which to develop and maintain a capable staff'; and
- i. 'to anticipate and plan for future developments in the informational needs and services which are likely to affect the university community' (1983 : 126).

Others who have defined university library objectives are Bryan

and Hean (1970 : 60), Burke (1970 : 401) and Harbold (1961 : 9).

In an attempt to elucidate what the objectives of the African university library in particular should be, Ifidan argues for attention to be given here to other roles providing intellectual leadership, promoting inter-continental and international understanding, promoting social and economic modernisation, and developing manpower at all levels. Ifidan depicts each aspect diagrammatically as a concentric circle of library provision (see diagram below) (1978 : 43-50).



Functions of African Universities and the objectives of their libraries.

In an era of continuous social and technological change, it follows that the objectives of university libraries must be seen and interpreted in the light of this dynamic, to ensure that libraries can fulfil their objectives. Obviously, in the context of this investigation where the university library is viewed as being central to the academic learning process it must articulate the goals and objectives of undergraduate education in which the paramount role is "to provide as much as possible for the undergraduate students' needs" (Voigt, 1970 : 254).

#### 2.1.1.3 Functions

In order to understand the range of library provision within the context of library objectives, and in order to determine what elements of these to consider further, it is necessary to probe a little deeper into what constitutes the specific functions of the university library emanating from the stated objectives.

According to Higham, there is one basic function common to all university libraries irrespective of their size, viz. "to acquire and make available all books, periodicals and related material required by all members of the university for teaching, research and study, in accordance with the educational objectives of the university, and within the limits of funds allocated to it" (1967 : 205).

The University Grants Committee (UGC), in their turn, saw the primary function of a university library at the height of the stage when new universities were being established in Britain as

a means of supporting "the teaching and research of the institution which it serves, and the quality of these will depend in no small measure on its ability to do so. It must make available, organize, and house books, periodicals, and related items. It should provide spoken and visual material as well as printed and written" (1964 : 1).

In a succinct but definitive attempt, Taylor suggests that the university library serves the five functions of providing :

- a. 'direct support to undergraduate instruction; that is, course reading, reserve books and recommended peripheral reading';
- b. 'support for independent student ... work, ranging from the term paper to ... thesis';
- c. 'support ... for faculty and graduate research';
- d. 'space where students may study their own materials'; and
- e. 'a context for browsing in the literature in the expectation that, by osmosis, students will absorb the great thinking and creations of western culture' (1972 : 36).

The first three functions relate essentially to 'warehousing' and the materials 'handling' process, the fourth is concerned with square footage (i.e. so that a specified percentage of the student body can find a place to sit) while the fifth function is one of promoting liberal education. The first four functions cannot be dismissed even if they may appear to be trivial in context. The fifth function, it should be noted, however, begins to hint at one of the more important tasks of a university library.

An exhaustive expansion on what constitutes a library's functions is offered by Rogers and Weber, who maintain that a university library fulfills such functions as :

- a. 'The selection of materials to be acquired and their procurement by various methods; materials may include books, periodicals, manuscripts, microtexts, films, sheet maps, and other graphic materials';
- b. 'The organisation and catalog listing of these materials via a complex of bibliographical records to aid in their location';
- c. 'The marking, bookplating, and tagging of materials to show their ownership, location, source of funds from which purchased or the name of the donor';
- d. 'The binding and protection of these collections to assure, within reason, their availability for future generations of students';
- e. 'The circulation of materials, some under various degrees of controlled access, in order to make the materials as widely accessible as possible to members of the university community';
- f. 'The provision of assistance to readers in the use of these materials, by means of publications, individual instruction, group instruction, and other instructional means designed to facilitate their use';
- g. 'The provision of study facilities in a useful variety of accommodations and locations, so designed as to be conducive to scholarly work';
- h. 'The relations with other libraries and institutions having library collections so as to benefit the scholar

elsewhere who needs occasional use of the university's items and, conversely, to benefit the university's scholars who occasionally need access to items in other libraries' (1971 : 2-3).

The functions of university libraries listed above by Rogers and Weber, represent what Ifidon refers to as "the functions of metropolitan universities" (1978 : 43). Ifidon argues that within the African context there is a need for a fundamentally different conceptualization of the university idea. The sector to which the traditional university is geared, constitutes a very small percentage of the total population in Africa. Hence, the metropolitan university which is structured for an advanced, industrial society is unsuited for wholesale implantation to African conditions in general. According to Ifidon :

... the traditional university functions of teaching, research and conservation and dissemination of knowledge still remain valid in the African university except that unlike in the former, they are equally important in the latter. In addition, the African university goes farther afield to promote both social and economic modernization, and inter-continental and international understanding (1978 : 47 ).

Therefore, these African university library functions are more broad-based, including the non-traditional processes of providing inter-disciplinary materials and general reading materials for leisure reading :

Since the way leisure is utilized reflects a social system and most African countries are still in a pre-industrial era, light reading materials are hardly ever used in the universities. In spite of this negative result, African university libraries provide these



materials for personal development (Ifidon, 1976 : 49).

As a result of the background in which African university libraries - albeit South African university libraries - find themselves it is only natural that their needs are different and their practices are different, even though their aim in essence will be that of libraries the world over, viz. to get the right book to the right person at the right time (Kwakwa, 1972 : 73). In the context of Nigerian university libraries, Ifidon reports that these libraries :

... wish to be seen ... as identifying themselves with the aims and aspirations of a rural community within which they operate. Consequently, the non-traditional functions ... are as important as the traditional teaching, research and dissemination of knowledge functions of metropolitan university [library] (1978 : 50).

An aspect of the function of the university library which relates to the library's responsibilities to the external community is worth noting here. Bryan referred to the very liberal attitude that British university libraries have "towards non-University readers or borrowers" (1966 : 28). This is attributed to the excellent public library services in Britain and their comprehensive resources. In South Africa - especially as a result of the large numbers of library-starved black undergraduates studying for their degrees through the University of South Africa (UNISA) - university libraries have additional burdens placed on their resources by users who have limited public library services at their disposal (Nicol, 1971 : 406), even at present.

In a study of the Department of National Education (DNE) South African Post-Secondary Education (SAPSE) manuals and the views expressed by the Committee of University Principals (CUP), Swanepoel and Boon found that these authorities "considered the rendering of services to the community an undeniable function of universities. This function could also be applied to university libraries" (1986 : 88).

Hence it would seem that South African universities, too, realize the socio-cultural context within which they operate and that their functions must be in tune with the needs of their community. Kwakwa has suggested, for example, that "the African librarian can make his library more representative of the African background, African ideas and ideals, and the African way of life" (1972 : 73).

In relation to the functions of the university library as they specifically relate to provision for undergraduates we can conclude that the main function of a university is the preparation of undergraduates for degrees (although they are naturally involved in higher degree and research work). To this end libraries realize that their facilities need to satisfy the whole gamut of users, and that "we have a prime duty to produce a more educated future generation" (Bagley, 1974 : 38).

#### 2.1.2 Summary

We can conclude that by general consensus the library is "the cornerstone of any academic enterprise" (Morehouse, 1965 : iv),

and that the overall goals and objectives of a university library are determined wholly by the goals and objectives of the institution it serves. Traditionally, university libraries have seen themselves as storehouses (Agulou, 1982 :22; Allen, 1971 : 8; Bixler, 1974 : 42) - responsible for securing their collection, creating and maintaining bibliographic structures for the collection, and then servicing and managing the collection (Thiaru, 1976 : 28). Increasingly, there has been a re-orientation of the library's role from being a passive auxiliary of the formal teaching - learning process to a proactive participant in the academic programme of the institution it serves (Bryan, 1977 : 45). Similarly, the librarian's role has shifted once more from a predominantly custodianship approach to one of a highly conscious service orientation.

## 2.2 ORGANIZATION OF THE UNIVERSITY LIBRARY

Academic libraries occasionally struggle with the sometimes contradictory objectives of developing and maintaining a comprehensive collection, creating detailed bibliographic records, as well as providing information resources and services to their users. The difficulty is due to the inability of these libraries to determine the relative contribution of these three primary facets to organizational success. By their nature libraries tend to be dependent organizations and although the purpose of university libraries may be thought to be self-evident, there are nevertheless divergent viewpoints among academic staff about the extent to which the university library should be an active developer of educational policies and

techniques, as distinct from a service organization which merely responds to the demands made upon it. The growth of student populations and the development of libraries may alter the approach of those who administer university libraries to become more proactive in the sense suggested earlier. Under these circumstances, librarians may promote new developments without waiting for specific demands from those who have traditionally formulated library policies in universities now being seen as 'reactive'.

#### 2.2.1 Library committee

Generally, university libraries are administered through a system of committees of academic staff. Therefore, in administrative terms, the administrative entity is quite small, and it is possible for the librarian to be well acquainted with the influential people in the making of financial and policy decisions. Fielding suggests that "it is broadly true that the constituency which determines the resources to be made available to the library in a university is made up of people familiar with the purposes and sympathetic to the needs of the library" (1977 : 376). Thus the library committee can provide an important link between the library and the academic staff to seek support for library innovations. It can be "extremely helpful in harmonizing library activities and faculty attitudes" (Harbold, 1961 : 55).

The library committee can provide the backing for the librarian who may need to introduce a predetermined policy and "can effect

good public relations if properly managed" (Brice, 1978 : 86). As a rule the library committee's powers are largely of an advisory character, and the committee seldom takes a hand in the actual administration of the library. Hence, the university librarian uses the committee more as "associates in library policy-making" (Harbold, 1961 : 55).

#### 2.2..2 Departmentalization

The usual pattern of organization - according to Fielding - is that of a hierarchy headed by a university librarian and his deputy, below whom there is an immediate break into a number of functional departments which are "typically acquisitions, cataloguing and reader services or reference and lending. The older universities usually had a galaxy of branch libraries but these were seldom staffed at a very senior level" (1977 : 382-3).

In a survey conducted at the beginning of the 1970s, Rogers and Weber also found that such departments are an exhibit of university library organization :

The traditional patterns of university library organization are not without logic. Technical processes, branch libraries, and reference or reader services constitute major functions and provide some guidance for further departmentation (1971 : 70).

As early as the 1960s, American universities tended to begin consolidating the library's organizational structure into 'technical' and 'reader' service divisions. This was intended to improve coordination between specialized units. Coordination is

usually accomplished by procedural manuals, written administrative memoranda and formal meetings. Fielding notes in this respect :

It is a truism of management that staff who are kept informed about their organization and consulted about matters which concern them, work better than those who are simply given instructions (1977 : 385).

An emphasis on ~~good~~ communication in an organization is essential, and the larger the size of the organization, the greater the problems of communication. Rogers and Weber urge "as a basic premise that the more one fragments an organization the more the communication problem is enlarged" (1971 : 72). Modern participatory management concepts, with more staff members involved in decision making, emphasize the need for staff meetings and good communication (Anderson & Miller, 1983 : 245-54).

Beyond the problem of communication in the library organization, is the organizational impact of technology in libraries which ~~often lags behind the introduction of technology itself~~. The organizational adjustments required by the new technology have, for the most part, meant that the technical service function of the library has been most affected since it no longer assumes the importance it once held in the total library operation. Hewitt contends that the new technologies have been "superimposed on the traditional work of technical services" (1984 : 211). The 'traditional' technical service division encompasses "the functions of acquisitions, cataloguing, classification [and] binding" (Gelfand, 1971 : 36). Further descriptions of the

activities which are performed in the technical services area are described in the literature (Tauber, 1953 : 487; Thompson, 1970 : 66-89). However, the 'high-profile' issues in technical services in university libraries nowadays center around online catalogues, minimal level cataloguing and authority control, among others (Hewitt, 1984 : 206).

While technical services librarians find themselves in the middle of a technological transition, reader services librarians are playing an increasingly important role (cf 2.2.3 and 4.4) with the introduction of online retrieval systems and the proliferation of media in a variety of formats. Reader services (cf Chapter 4) have been defined by Gelfand as follows :

Readers' services, often called 'public services' are those offered directly to the users of the library, in contrast to the technical services.

Circulation services are common to all types of libraries. They usually include provisions for the use of library materials within the library, for lending them to its own clientele and to other libraries, and for the maintenance and control of book storage and delivery systems.

\* Reference and information services may be offered centrally in a small library, or subdivided into general and specialized services in a large library with many special collections, departmental and faculty libraries ( 1971 : 37).

Reader services are the key component in the organizational structure of a university library. Stoica supports this contention - considering the performance of the library and its components to be "user-oriented not only because holdings are destined for readers, but also because the organizational structure aims at a closer reflection of readers' opinions,

skills and goals" (1977 : 331).

### 2.2.3 Change and Planning

As university library is a service organization it is inevitable that policy regarding reader services follows changes that occur in courses offered at the institution, teaching practices and even research patterns. Bolton believes that the organization and procedures followed in a university library have to be changed in order to "make the institutions more capable of fulfilling their basic roles in modern society" (1971 : 16).

In a recent review of university library organization, MacKenna observes that from 1950 these changes in library organization were most noticeable, seeing a shift in emphasis from book-processing to a concentration on reader service (1980 : 93). Although changes may be initiated externally, the degree of response depends on the library staff. Fielding has described this response as follows :

The degree of integration between the services of the library and the needs of its clientele will depend on the efficiency of liaison between academic staff and students and library staff; on major matters this is part of the external relations of the library and a particular care of the chief librarian (1977 : 385).

Bolton has also concluded that the university librarian "ought to become very much more of a planner than has traditionally been his inclination" (1971 : 16), while Orne postulates that "library planning for an academic institution can only be as good as the planning for the whole institution and its place in that planning" (1976 : 328).



Senior library staff normally initiate proposals for change. And so it was senior librarians who responded in a variety of ways to the shift towards making reader services the primary objective of university libraries. They introduced library orientation (cf 4.5.7.6.1) and course-related instruction in use of the library (cf 4.5.7.6.3). Some librarians started short-loan collections (cf 4.5.5) or separate undergraduate libraries (cf Chapter 5). (MacKenna, 1980 : 94-95). Whatever the problems, librarians cope by planning. They plan the course of the day-to-day work of the organization, review present methods, decide to drop activities which are no longer useful and propose new patterns of organization.

#### 2.2.4 Centralization versus Decentralization

It is generally known that departmental libraries exist at many universities in the countries surveyed. This brings us to the question of the centralization versus the decentralization of the collections. Considerable disagreement between librarians and academic staff tends to result over this question. There are, in essence, two legitimate sides to this tension : the academic staff want convenient and easily accessible library service while librarians lend priority to organizational efficiency cost-effectiveness : to them decentralization of the library into branch and departmental libraries creates management problems which are not matched by the claimed benefits of decentralization among some of the users.

Librarians usually interpret centralization of library facilities

as encompassing two aspects, viz. the advantage of (a) performing certain operations (for example, technical processing) for various units of the system in a centralized location and (b) needing to control the very minimum number of service units required. Edelman and Tatum, for example, have noted that "centralization has several aspects, including centralized administrative control, centralized processing (acquisitions and cataloguing), and the physical merger of collections" (1976 : 226).

In the opinion of Tauber, there are many built-in relationships and aspects peculiar to local conditions that dictate the measure of centralization or decentralization of a university library :

... there are various combinations of these types of centralization, depending upon such factors as historical conditions, personality strengths or weaknesses, types of library quarters, and the nature of library operations (1961 : 327).

Centralized administrative control is not easily achieved in very large institutions; yet this strategy can serve to keep administrative problems to a minimum. Wells, for example, acknowledges openly that administration, if centralized "is more\* efficient and more economical for the university as a whole than decentralised libraries" (1973 : 33). This increased level of efficiency of a centralized university library is also affirmed by Harris (1978 : 82), Edelman and Tatum (1976 : 227), and Davidson (1969 : 131). Indeed, Muller asserted with some confidence two decades ago that "there is increasing recognition of the inefficiency resulting from excessive dispersion of

library collections" (1969 : 143).

Other factors which librarians must take into account are the availability of alternative physical facilities, attitudes of academic staff towards the library, sufficient funds, the existence of some easily decentralized parts of the collection, and general university policy (Walsh, 1969 : 211-2). Therefore in this context, the question of a decentralized collection and departmental libraries in particular will involve compromise. According to Miller, general interests will always be balanced against special concerns (1939 : 75-9).

The arguments for and against decentralized collections in universities have been rehearsed many times (Ashworth, 1972 : 274-82; Aucamp, 1972 : 110-27; Kesting, 1971 : 33-9; Muller, 1969 : 138-49; Rogers & Weber, 1971 : 73-82; Wells, 1973 : 26-35). It is nevertheless cogent to note here that in general a university library's state along the continuum of centralization and decentralization tends to reflect the historical situation. As Walsh has remarked " it can be generalized that the older and larger a library, the more decentralized it will tend to be" (1969 : 210).

The origin and cause of decentralization can often be traced back to a time when the university either had no university librarian or else one with no professorial rank and hence incapable of wielding any professional clout. Fielding concluded in a recent study that many departmental libraries "were established at a time when there was little professional tradition and the library

staff had small opportunity to influence policy" (1977 : 387). It would appear that branch or departmental libraries tend to be a characteristic feature of older universities. According to Orne for example :

Some of these institutions, having grown up over a long period of time with a multitude of small private collections ... held out for thorough decentralization. Others, whose development was more compressed in time, moved more swiftly to centralized control (1970 : 2230).

Decentralization tends to be limited or rationalized in institutions established since the emergence of a strong sense of professionalism in librarianship. Edelman and Tauber also believe that wherever a major new library building has been erected this usually resulted in a consolidation of resources and services and thus "decision to centralize the control of library operations has marked a turning point in the history of each academic library" (1976 : 227). In older institutions the current situation will inevitably reflect a state of tension between the administrative and professional interests of the library on the one hand, and the tendency for the academic staff member to want his major information sources unified and integrated or close at hand.

Organizationally, librarians claim centralization can bring greater convenience to library users although this argument is often discounted by academic staff. Genaway and Stanford allege that amongst the arguments academic staff would advance against centralization would be the need for unique materials, longer hours of access (presumably because they would have their own

keys) distance from the main library, and delays in book processing time (1977 : 190).

Tauber has experienced that much of the pressure for departmental libraries comes from the teaching and research staff (1958 : 148), while Kasses, Taylor and Jones describe this pressure for decentralized libraries as a mere form of "empire building" (1978 : 177). The formation of departmental libraries is prevalent whenever academic departments "begin to feel themselves a self-sufficient unit. From then onwards, ... comes a demand for an adequate library within the department" (MacKenna, 1964 : 609). The problem is sometimes compounded when academic staff do not even make proper use of such departmental libraries, and build up collections in their own offices constituting "several tiny collections within each department" (Smith & Baxter, 1965 : 13).

The popularity of a decentralized library, and departmental libraries in particular, is summed up by Harris who observes that they " have all the advantages and disadvantages of the corner shop. Their libraries are not so very different from your friendly neighbourhood grocer. They may not be so efficient and they cost a bit more but they provide a personal service, they defer to the right people, they are at hand, they are not too big. By and large they have a tradition of service. The trouble is that service is what they cannot always provide" (1978 : 82). Walsh expresses the situation more blatantly :

... departmental policies and politics may create needs whether real or imagined for separate libraries; ... and it is a fact of academic life that it is also often a status symbol (1969 : 212).

Departmental libraries sometimes develop as a response to the recurrent overcrowding that inevitably happens as a book collection grows. The space-consuming nature of libraries is therefore almost always a factor in decentralization (Walsh, 1969 : 212); it may even affect the librarian's decision to decentralize.

Most teaching departments prefer to have the most useful books and journals close at hand, preferably within the same building - for convenience and quick consultation. Raffel and Shishko found, for example that the "term 'departmental libraries' is usually associated with research and journal-oriented libraries ... those who selected departmental libraries are oriented toward journals rather than research per se" (1969 : 63).

A small collection is easily comprehended, services and policies can be tailored by library staff to meet the needs of staff and students. Many academic staff - typically in the faculties of science and technology - tend to regard the library as a passive organization with primarily custodial responsibilities. Therefore it is difficult to convince these academics that the coordination of a collection, access to a wider range of material (for example, reference books and indexes), professional staff assistance and an active approach to library service really compensate for the benefits of a "personalized fetch and carry system" (Fielding, 1977 : 388).

Academic staff are generally indifferent to administrative arguments that decentralization brings unnecessary duplication.

Such duplication is normally seen as essential to provide for the "duplication of heavily-used material without making heavy demands on the shelf space of the main library" (MacKenna, 1964 : 610).

Departmental libraries mainly purchase the materials which interest them and ignore any suggestions that they ought to build up a well-balanced collection. They adopt practices and give services which appear most appropriate to the people in the department for whom the library provides a service. Organizationally university librarians often experience problems of control over these libraries.

\* Limited hours of opening or the expense of having professional staff spend much time on clerical work in comparatively small libraries are also cause for concern by library management. Librarians working in departmental libraries may be short-term appointments or unqualified and unable to exert any influence on the departmental library. Some may be staffed, if at all, with part-time secretarial help.

\* Lack of coordination between the main library and departmental libraries can similarly result in uneven growth and conflicting policies. Munthe argued almost fifty years ago "from the administrator's point of view the most important problem is how to bring about unity and cooperation between the main library and others" (1939 : 116) - a view still prevalent among modern university library administrators.

It is significant to note, however, that from the point of view \*of undergraduates, departmental libraries can have a serious effect on the service provided for them, since departmental libraries "are frequently designed almost wholly for the convenience of research workers" (Moss, 1966 : 96). Undergraduates are more likely to opt for centralized services, suggest Raffel and Shishko (1969 : 64), since centralized library facilities favour interdisciplinary interests (De Andrade Lima, 1978 : 90-104; Kesting, 1971 : 33-39) because :

Decentralization scatters the book collection over the campus and inconveniences students as cross disciplinary study becomes prevalent (Braden, 1970 : 390).

It is inevitable that with departmentalization, collections are split up and material separated. For students "following one line of enquiry ... [this] might involve visits to three or four different parts of the college, or much valuable material might not be found at all" (Smith & Baxter, 1965 : 14). Access to adequate library resources is critical for all university students, the problem of access is particularly acute for part-time students (Orton & Wiseman, 1977 : 23). Some, if not all, departmental libraries have restricted hours of access, which presents notable problems for part-time or evening students (Talmadge & Kidman, 1962 : 522).

\* Decentralization is a less common phenomenon in South Africa than in Britain and Europe. The main exceptions apply to special circumstances when branches of the university are physically remote from the main campus. Examples of these are the East



X London branch of Rhodes University, the Umlazi branch of the University of Zululand, the Butterworth branch of the University of Transkei, the Zwelitsha and Mdantsane branches of the University of Fort Hare and the Vanderbijlpark branch of the Potchefstroom University for C.H.E. It should be noted, however, according to Wells, that "subject libraries, or divisions on the lines of little used material, undergraduate libraries, rare books and manuscript libraries ... occur in various universities" in South Africa (1973 : 27).

+ Kesting reports in this respect that the universities of Cape Town and Stellenbosch, for example, are both "markedly decentralized, owing partly to the prevailing tradition in the early years of the libraries' history and partly to the constraints of cramped campuses which were not designed to cater for student enrollments in excess of 5,000" (1980 : 182).

In evaluating the pro and contra arguments of each side, it appeared to Stefanacci, Wood and Huff that the essence of the departmental versus central library question "is the contradiction between the desire on the part of the faculty and researchers for immediate physical proximity to constantly used texts and journals, and the intensified requirement for frequently consulting a broad spectrum of literature to support modern teaching and research" (1977 : 434).

The final decisions on the degree of decentralization and the kind of decentralization which the library will commit itself to, depend on general university policy and the attitudes of academic

staff towards the library. Walsh has generalized that "in most cases, the policy decided upon will be either one of relative centralization or one of relative decentralization" (1969 : 212-3). Although allowance must be made for campus geography, intensity of use and the size of the collections, libraries are urged in terms of standard D.2 (of the ALA Standards for university libraries) to centralize their library units (cf 3.3.1).

#### 2.2.4.1 Types of decentralized collections

Wells identified five types of decentralized collections :

- a. branch libraries
- b. subject or sectional libraries
- c. departmental libraries
- d. class or seminar libraries
- e. institute libraries (1973 : 27).

##### 2.2.4.1.1 Branch libraries

Branch libraries are frequently, although not necessarily, service units at locations different from the main campus. Wells has defined them as :

... a large collection of books and other material, with both unique copies of certain books as well as duplicates of those in the central library, either used by a specific faculty such as medicine or law, or by more than one subject department such as architecture and engineering or the natural sciences (1973 : 27).

Branch libraries are generally considered integral parts of the main library. Usually the main library orders the material for a branch library. However, occasionally a branch library may order its own material and process this, especially if this is specialized material and is not represented in the main library's collection. Walsh warns in this connection that any "pattern of branch libraries creates administrative, fiscal, and collecting problems as well as its own distinct ... possibilities and advantages" (1969 : 211).

In his potemic against branch libraries, Watts' opposition is summarized under five headings :

- a. 'the growing interdependence of knowledge';
- b. 'tremendous inconvenience to the user';
- c. 'isolation of collections';
- d. 'expense; and
- e. 'communication between departments' (1983 : 196-202).

Watts maintains that "branch libraries would appear to be going back in time" (1983 : 197). Woodsworth, on the other hand, believes that with the technology available communications will be much better fostered through decentralized and local input of data by branch libraries (1983 : 199). Branch librarians, implies Atkinson, "are not really in the business of running libraries, ... [but are] in the business of providing library services" (1983 : 201) (cf university branch libraries in South Africa 2.2.4).

#### 2.2.4.1.2 Subject divisional or sectional libraries

These libraries are quite distinct from departmental libraries (cf 2.2.4.1.3). The departmental libraries deal with small segments of knowledge, for example, departmental libraries in law, music, chemistry, geography, psychology and physics. However, if several related departments are combined into larger units these form a division. Johnson believes this grouping of departmental libraries into divisions, similar to academic divisions "seemed promising" (1974 : 41) in the inception. Wells' definition of a subject or sectional library is quite at variance with the above. Wells defines such a library as "an integral part of the university's book collection relating to a particular subject and merely housed in a department or faculty building" (1973 : 28).

Some university libraries divide their holdings into two, three, four, or even five large divisions. The broad disciplinary divisions favoured by libraries are social sciences, humanities and natural sciences. The holdings of chemistry, education, biology, plant sciences, zoology, mathematics, computer science and all the other natural science disciplines would be combined for example, into a science divisional library. It is possible that if the collection is relatively small such divisions are not practical.

The decision to have a subject-divisional library, however, "beteken nie noodwendig 'n gedesentraliseerde biblioteekstelsel nie. Die spesiale biblioteek vir elke kennisterrein kan in

sinvolle eenhede binne die sentrale biblioteek gegroepeer word met 'n vakbiblioteekaris in beheer van elke eenheid" (Oeschger, 1973 : 42-3). Likewise, Aucamp has asserted "dat so 'n stelsel besliste voordele inhou vir die univertsiteitsbiblioteek wat op 'n tweesprong tussen sentralisasie en desentralisasie staan" (1972 : 108).

The advantages of subject divisional libraries lies in their provision of specialized, as contrasted with general, subject assistance. It creates opportunities for "professional librarians to establish close working relations with their clientele" (Roberts, 1977 : 470). Another advantage is that with the subject specialization arrangement, library staff "combine information work with other activities, book selection, classification, etc." (Stuart, 1974 : 23).

An excellent and exhaustive exposition on the development of subject-divisional libraries is offered by Johnson in his thesis on the topic (1974), and therefore it is deemed superfluous for the purpose of this investigation to expand further.

#### 2.2.4.1.3 Departmental libraries

Departmental libraries are found on university campuses but not as numerous as several decades ago. Harvard University led the way with highly decentralized library facilities (Johnson, 1974 : 11). In Europe - particularly in Germany and Scandinavia - university departments formed their own collections. These collections were often more extensive than the main collection

and "difficulties in the way of any progress towards centralization have been much greater ... (MacKenna, 1980 : 101).

Wells has defined the departmental library as consisting "of duplicate copies of books and possibly of periodicals which are also available in the main library" (1973 : 28).

As mentioned in 2.2.4 the cost of duplication and inconvenience are some of the reasons that can militate against a departmental collection and favour the centralization of a collection. Resources are usually gathered together and placed in a central library whenever increased student enrollments and growth of the collection makes it necessary to build a new library building. At the many institutions which still have departmental libraries, these libraries have survived either because they served departments at locations far away from the main library - what Kuhn refers to as the "geographic dispersion" factor (1969 : 190) - or because they serve a highly specialized field.

#### 2.2.4.1.4 Class or Seminar libraries

These libraries have been defined by Wells as "A collection of duplicate copies of students' text books or a small number of dictionaries and other reference books housed usually in a professor's or tutor's room for the use of their students, is generally known as a Seminar Library" (1973 : 29).

Seminar libraries are mostly rather small reading rooms with a more or less permanent collection of books. Seminar libraries

are, according to De Vleeschauer, exclusively a 'teaching type' library (1967 : 232).

#### 2.2.4.1.5 Institute libraries

Institute libraries are considered special research libraries by De Vleeschauer (1967 : 232), although Aucamp says the distinction between the institute and seminar libraries in the literature is not always clear (1972 : 24). Wells has identified two types of institute libraries, viz. (a) "libraries of institutes of education" and (b) "the libraries of centres or institutes, established sometimes from outside grants ..." (1973 : 29-30).

On the Continent there are often dozens, even hundreds of what are called institute libraries in the university. Liebaers laments that they "proliferate almost at will. They have no professional staff and there is no satisfactory access to the collections. This is true because they are outside the authority of the university librarian" (1971 : 49).

#### 2.2.5 Summary

The most striking feature of university library organization in the past has been its isolation and treatment as an autonomous component in the university organization. However, it is increasingly providing - through the new communications technologies - a more service oriented facility. The new technologies require a different organizational structure to support such an enterprise. Decentralization has offered itself

as a solution to when a library 'becomes outsized' (Ammundsen, 1977 : 82), and Holley claims the "presence of numerous 'bootleg' or 'broom closet' libraries on campus ought to indicate to somebody that most university libraries are failing to provide adequate service to segments of the university community" (1983 : 202). The debate over centralization versus decentralization has long been a contentious issue. Librarians tend to favour a centralized collection while academic staff tend to advocate decentralized or departmental libraries. Without central planning and coordination no library system will succeed. Even if the best library service is a centralized collection, the housing of such a monolithic collection presents problems.

### 2.3 LIBRARY ACCOMMODATION

The library, because of its central importance, is the feature building of a university campus. It is an integral part of any campus and its location in relation to the whole campus is important. Library accommodation is an important variable when considering the library facilities needed by undergraduates. Apart from the need for adequacy in terms of overall cubic capacity, other factors such as functional design, contribute to the effectiveness and efficiency of university library buildings. The physical planning of a library requires that librarians "establish what factors are influencing trends in building planning and design - these are likely to include the increasingly diverse needs of users, the growth in the use of



audiovisual material, the rise in building costs, and advances in technology, including the increasing use made of computerized systems" (Edwards, 1987 : 16).

### 2.3.1 Location

The physical location of the library in relation to the whole university campus plan and its design, are often outside the control of the librarian. Bryan has emphasized that except in 'brand new' institutions, the choice of site may be extremely limited. He also states that even the most perfect site will not "counterbalance an ineffectively designed building" (1977 : 422).

Rogers and Weber maintain that as a university campus is generally so large no site is ideal (1971 : 335), while Lyle argues that the positioning of the library in "a central location in relation to the greatest concentration of academic buildings is preferable to one further removed but nearer to the student residence halls" (1974 : 281-2). Fairhurst likewise states that "central siting is vital for the success of a central library, and even five minutes walk is beyond the scope of some academics" (1965 : 108). This categorical position is contradicted by Bryan who believes that one of the tritest maxims of university planning has been the belief that the 'library must be at the centre of the university' (1977 : 422).

Davidson concluded that the question of 'centrality' of a university campus has become a complex problem. He acknowledges that the main consideration when selecting a library site is its

location with regard to other academic buildings and to student residences, but argues that relationships to traffic parking should also be considered (1969 : 30). Gores suggests that while libraries need not be situated at the heart of the campus "especially in commuting institutions, the library will be located on the perimeter of the campus ... to provide maximum access" (1968 : 141). Bryan alleges that if the library is well designed and efficiently run, it will soon become the centre of university life even if its location ... is not central" (1977 : 422).

Whatever the site chosen, it should take into consideration the geographic dispersion of the campus, accessibility to student residences and lecture halls and any facilities which are shared with other departments or services on campus. University library planners, in accordance with standard D.2 of the ALA Standards for university libraries, are encouraged to locate the library "so that the university community will have convenient access" (cf 3.3.1). It is of primary importance that university libraries are located in such a way as to minimize inconvenience to users. Burying a university library underground has in some cases solved location problems such as inefficient land use in a crowded campus, preserved open spaces and historic buildings, prevented the library building from overwhelming adjacent buildings, and even kept an important view unobstructed. South Africa's first underground library (and the largest in the world), the JS Gericke Library at the University of Stellenbosch, was opened in 1984. The reason for siting it underground was made after architects' research "had shown that a building on the site would

not be compatible with the scale of the surrounding low-rise buildings. The decision was made to go beneath the historic Jan H Marais Square, located close to most of the University's academic and administrative buildings" (Fuhlrott, 1986 : 258). Whatever the site, it should be large enough to accommodate a library building with maximum collection and seating capacity, and room for extensions to the building either vertically or horizontally.

### 2.3.2 Building Design

A fundamental element in the success of a library as a university service is a well-designed building. It is not only a place where services are provided, it is also a place where large numbers of students (and staff) spend many hours a day studying. Hence the "environment is as critical a feature as administrative efficiency" (Higham, 1967 : 218).

Durey proposes that the first problem to be considered in building design "is whether the building is designed to encourage use of the collection" (1973 : 321). Campbell and Shlechter similarly conclude in their evaluation of a typical university library, that the physical design of the library may influence student behaviour and satisfaction (1979 : 26-41). According to them it is "somewhat unsettling that behaviourally oriented design research has paid so little attention" (1976 : 27) to university library design, especially because of the university library's central role in the learning process. Campbell and Shlechter used a 'holistic approach' to examine a campus library as a total system of interconnected subsettings in which user

behaviour takes place. In the past, studies of student behaviour have centered on specific behaviours in selected subsettings. Campbell and Shlechter's objective was to evaluate a typical university library and highlight the influences of library design on student behaviour, which they hoped would lead to "better decisions about the planning and management of library space" (1979 : 27).

Fairhurst is of the opinion that with library building design "the type of service to be offered will greatly influence the type of building that is conceived" (1965 : 108). Bryan even goes so far as to allege that "An ill-sited, over-rigidly designed or permanently constricted building can cripple the effective functioning of any service" (1977 : 414).

This emphasises on 'design for use' is reflected in the commentary on standard D.1 of the ALA Standards for university libraries which states that :

A university library should be attractive, inviting, and carefully designed to promote operational efficiency and effectiveness of use (cf 3.3.1).

Older university library buildings tended to be monumental (Metcalf, 1965) and there was a "profound lack of appreciation of the niceties of function on the part of librarians as well as architects" (Bryan, 1977 : 414). Most of the older universities inherited what has been termed 'fixed-function' buildings - i.e. each area was designed to meet a specific function and there was no possibility of changing this function. The fixed-function

libraries built between 1910 and 1940 used monumental elements. This monumentality refers "to almost any building element that exceeds in size or cost what is necessitated by function" (Kaser, 1984 : 274).

It was inevitable with the changes in reader services echoing the changes in higher education teaching practices, that the provision for users would produce a demand for an increasing variety of library accommodation. This orientation towards reader services has had "a powerful influence on the design of university library buildings" (Bryan, 1977 : 417). Today any new library building must be so designed that a building should be able to be "changed internally with the minimum of difficulty and disturbance" (Fairhurst (1965 : 109). Recent successful libraries according to Faulkner-Brown should be :

- a. 'flexible, with layout, structure and services which are easy to adapt';
- b. 'compact, for ease of movement of users, staff and material';
- c. 'accessible, from the exterior into the building and from the entrance to all parts of the building, with an easy, comprehensive plan needing minimum disruption';
- d. 'varied in its provision of accommodation and user services to give wide freedom of choice';
- e. 'organized, to facilitate appropriate exposure between information sources and users';
- f. 'comfortable, to promote efficiency of use';
- g. 'constant in environment, for the preservation of library materials';

- h. 'secure, to control user behaviour and loss of library material'; and
- i. 'economic, to be built and maintained with minimum resources both in finances and staff' (1979 : 3).

One of the major requirements to accommodate change is flexibility in design. This has become an accepted element in library planning. Moss notes that "the first essential of any library building is flexibility" (1966 : 98). Likewise, in the commentary on standard D.1 of the ALA Standards for university libraries it is maintained that :

The fundamental consideration in designing a library building should be its function. Since the nature of collections, services, operations, and the needs of a library's clientele can change significantly over time, present and future flexibility is an important element in library design (cf 3.3.1).

The ultimate form of flexibility was the modular approach promulgated in the mid-1930s by Angus Sneed Macdonald (cf Ellsworth, 1968; Metcalf, 1965). The modular design concept totally superceded the fixed-function library building. In modular planning the total usable space is divided into cubic units of precisely equivalent size and which, in theory, are completely interchangeable in terms of the different functions of the library. Modular planning allows "for expansion both outwards and upwards, for any necessary internal re-arrangements and for any modifications caused by shift of emphasis in the teaching pattern of the university" (Moss, 1966 : 98).

Conflict over modular library buildings has centred on the

building costs involved (ultimate flexibility requires that each module is provided with exactly the same facilities to the same high standard throughout the building), servicing costs (heating, air conditioning, lighting in all areas) and the non-flexible areas (toilets, staircases, fire escapes, etc.). The debate over modular library buildings has given rise to a concept of modified flexibility (Fairhurst, 1965 : 109). Nevertheless, the "acceptance of open and modular planning ensured later buildings of improved flexibility and architectural distinction" (Roberts, 1977 : 472).

Some of the modular libraries because of their "unadorned severity and stark simplicity ... lacked visual interest" and were replaced by libraries from 1960 onwards, which served two functions, "one bibliothecal and the other symbolic" (Kaser, 1984 : 269-70). Metcalf identified the design problems of these libraries as :

- a. 'irregular shapes';
- b. 'interior or exterior courts';
- c. 'monumentality'; and
- d. 'too much or too little glass' (1965 : 21-3).

Building design nowadays tends towards the modular, according to Kaser, as "libraries function better in buildings that fit the simpler tastes of the 1960s than they do in the more complex styles of the 1980s" (1984 : 280). Beckman notes that with the introduction of the new technologies many of the libraries built in the late 1960s and early 1970s have proved to be "somewhat inflexible" (1983 : 282). The flexibility which librarians

requested in the late 1960s was "the correct solution [but] ... not enough was provided" (Beckman, 1983 : 282). Flexibility to introduce the new technologies and networks into university libraries and provide the physical facilities is needed in academic library environments.

### 2.3.3 Physical Environment

The internal layout of the library - the book stacks, study facilities and services - largely depend on the planning of the librarian in conjunction with the architect. Although in recent years "library building, planning and equipment have come to revolve around readers whose claims for materials and services are becoming increasingly heavy and varied" (Moss , 1966 : 98)). To this end, Campbell and Shlechter believe that library planners can assist student users "by placing the most central facilities close to the main entrance as well as in close proximity to each other" (1979 : 38).

The data collected by Campbell and Shlechter suggest too, that a large proportion of the negative aspects of the university library, as perceived by the students, concerned the physical environment of the library such as its lighting, heating, room size and spatial arrangement of facilities. Moss also concludes that "Undergraduate reading ... may be encouraged to some extent by the smallest detail that makes any reader more comfortable .... Hence the growing emphasis in recent years upon lighting, air conditioning, the use of colour and library furniture" (1966 : 102).



The commentary of standard D.1 of the ALA Standards for university libraries comments on the environmental features of a library and remarks on the specific factor :

... that affect clientele, staff, and collections (light, ventilation, temperature and humidity control, vertical and horizontal transportation, safety features, etc.), layout of the stacks, number and variety of reader stations, relationship between stacks and reader stations, relationship among service points, effective flow of materials, and adequacy of space for staff and operations (cf 3.3.1).

Edwards believes that the internal environment must be "carefully considered if users are to feel comfortable" (1987 : 17). Studies by Lieberfeld found that the library's physical environment did not change patterns of use as the "principal generator of library use is the academic program" (cf 2.4.3.1 and 4.6) (1983 : 278).

In a survey to examine the adequacy of reading areas as study places, Sommer found the most common reason for students studying in the library was the quiet. Other reasons cited by the students were proximity or convenience of the library, availability of reference materials, the studious atmosphere and the freedom from distractions. Sommer also established that many students study material they bring with them into the library. The most common disadvantage of studying in the library given by students was noise from other people. Sommer reports that reaction by students to a list of twenty-four items of library environment (lighting, ventilation, floor coverings, seating, etc.), resulted in lighting being rated highest. Ventilation was equally as important, with some users rating the carrels "hot and stuffy". A third of the students were dissatisfied with temperature, with 15

per cent complaining about the cold. In the area of furnishings, carpeting was the one item most associated with an overall favourable view of library reading areas. Curiously, more than half the students wanted an improvement in snack facilities, or to study in places close to where they can snack occasionally (Sommer, 1977 : 254).

Among the socio-psychological aspects of a library, Sommer found that one-third to one-half of the readers believed that there was a deficiency in quiet, privacy and study atmosphere. Sommer concludes that there "is no single study environment that will meet the needs of all individuals. This is also true for lighting, ventilation, and temperature" (1977 : 255).

Distractions to users in the library revolve mainly around movement of people in and out of a library, talking, other sources of noise, friends nearby and even people-watching (Sommer, 1977 : 256).

Since the 1940s all the new British and American university libraries have had open plan arrangements. The reasoning behind this being that it encourages students to browse and will discourage students to rely too heavily on their textbook and prescribed readings. Ross observes that browsing activities in large, open shelf library collections may be curtailed and even eliminated as university library buildings become crowded and warehouse-type structures are constructed (1983 : 269). Open access has become the norm in the modern Anglo American university library. In fact, undergraduate users expect to have

direct access to all the material they need. The closed access book stack for reserve book collections may be provided, but by and large "the closed stack would be acceptable only in the central research library of a system in which the undergraduate was adequately served by a separate library or a series of faculty libraries (U.G.C., 1964 : 9).

The flexible, informal interior arrangements of university libraries as well as a pleasant physical environment is particularly important in university libraries where housing is in short supply, since appropriate study areas rarely exist outside the library and lecture hall (Ugonna, 1983 : 128).

#### 2.3.4 Library Space

In many university libraries there has been substantial waste of space through inadequate planning and design. This "waste of plant resources can serve to diminish the operating funds available to libraries" (Liebefeld, 1983 : 277). The impact of new technologies on libraries will not diminish the need for increasing space for library collections. In fact, Beckman sees space allocations for the new collection formats (videotex, videodisk, micropublishing, etc) challenging existing library standards for collection space (1983 : 283).

The 1969 ALA Standards for university libraries required that libraries seat one-third of the total student enrollment. The 1979 ALA Standards stipulated no such quantifiable standards with regard to seating. The commentary on standard D.1 merely states :

The size and composition of the university's enrollment, the nature of its instructional and research programs, the form and publication rate of library materials strongly influence library requirements, and it is necessary that these requirements be subject to continuous evaluation and planning (cf 3.3.1).

The usual practice when calculating the number of seats has been to allow approximately one place for every four students (U.G.C., 1964 : 10). Calculating the proportion of seats should also include non-resident students. However, Talmadge and Kidman note that "A local pattern of extreme peak loads may require far greater seating capacity in relation to enrollment than formulae normally call for" (1962 : 525). In the context of the African university library, Ugonna believes that libraries should aim at seating as many as 40 per cent of enrolled students. He reasons that the lack of alternative study accommodation due to housing shortages and over-crowding in university hostels makes it essential that university libraries increase seating accommodation (1983 : 128)

In South Africa there were no space standards until 1979 when the Department of National Education instituted the South African Post-Secondary Education Information System (SAPSE). The SAPSE space norms indicate the amount of space the library should have "and are based on present or projected numbers of full-time equivalent (FTE) students" (Edwards, 1987 : 17). If a new library building is proposed then the projected FTE student enrollment is obtained for a specific year in the future and this figure multiplied by the SAPSE space norm. The result (measured in

assignable square meters (ASMs) is the library area permitted by SAPSE. An existing library building is also measured against the SAPSE space norm, and library space reutilized if necessary to conform with SAPSE requirements (RIGLYNE, 1984 : 1). The space norms applicable in libraries are as follows :

Office and Conference space	=	0,213 ASM/FTE student
Reading/Study space	=	0,625 ASM/FTE student*
Stack space	=	0,009 ASM

(\* this norm is applicable to all study levels)

Provision is made with this norm for seating 25% of the FTE student number, with an average of 2,5 ASM/station. A breakdown of the global norm which is inclusive of office space is as follows :

Undergraduates	1,478 ASM/FTE
Honours students	2,055 ASM/FTE
Masters and Doctoral	2,633 ASM/FTE

According to Edwards, "Any university library which has its size determined by the number of FTE students registered with the institution is bound to find ultimately, that the growth in stock exceeds the growth in student numbers, and that a critical point in terms of space is (or will be) reached" (1987 : 17). When such a stage is reached the answer is to remove all less-used material to storage. In South Africa, Edwards believes, the idea of a 'cut-off point' cannot be supported because of the disadvantages to the researcher :

a. 'distance from the sources of book supply';

- b. 'distance from great library collections of Europe and America';
- c. 'distance between libraries within the country';
- d. 'lack of supplementary resources such as large city and national libraries' (1987 : 17).

The concept of a formula allocated according to the number of students at an institution is challenged by Lieberfeld. He maintains that certain variables influence a student to use the library. These variables are :

- a. 'the nature of the academic program';
- b. 'the nature of the collection';
- c. 'the library's circulation policies';
- d. 'the character of student residences';
- e. 'the academic calendar';
- f. 'the location of a building' (1983 : 278).

Lieberfeld asks "Why should this configuration of factors be the same for any two institutions?" He maintains that if there is no other way of determining the number of seats required in a university library, then a formula might be justified. The alternative which he puts forward is a field survey of actual user demand which in his belief is "entirely typical". In 42 studies conducted in the United States by Lieberfeld it was found that reader space and stack space constitute 80 to 90 per cent of library space (1983 : 277). These two aspects of library space are discussed below.

#### 2.3.4.1 Reader Space

As much as library design has improved, so too has reader space. This area is critical in a university library, because the library is a place where students spend a lot of time and the reading environment has an important influence. Although Weber believes that study areas "are almost never handled in ways which meet most of the students' stated desires" (1969 : 111).

Users have many preferences regarding their surroundings and seating accommodation may vary according to student level. Undergraduates need "intimacy and study privacy" according to Kuhn, who believes this can be satisfied by "alcove seating, individual seating and reading pavilions" (1969 : 194). The University Grants Committee found :

... strong evidence that students increasingly favour individual seating ... . There is also a demand for study rooms in which small groups may work together. To sum up, a variety of types of seating is called for, including areas for informal reading and discussion. There is no doubt that undergraduates must be encouraged to spend more of their time in libraries, and if the hours of use are to be long, then the accommodation must be generous (1964 : 10).

The preference for single reader tables was also pointed out by Bryan who notes that "Almost all the academic library buildings constructed in Australia ... have heavily emphasized single reader tables" (1977 : 421).

Although individual seating should constitute the majority of seating, variety in seating is desirable (Braden, 1970 : 389).

Lounge seating is very popular, and Kuhn stresses that such "informal lounge clusters ... point to the relaxed, inviting atmosphere ..." (1969 : 201) which undergraduates find so desirable. It is only natural that the seating provided by a library should be such that undergraduates react to it positively.

Study carrels are also appreciated by students "especially near examination time" (Edwards, 1987 : 20). These reader stations will in the future have to have sufficient space for a terminal or micro computer to be used. This, Beckman suggests, "is an ideal which may soon be a standard requirement ... . We can therefore predict that more space per user will be a requirement, as each reader station acquires a more sophisticated environment" (1983 : 283).

#### 2.3.4.2 Collection Space.

The rate of growth of the collection may be decreasing due to financial restraints, but will not diminish if university libraries become involved in rationalization projects (cf 2.4.2). Collection space needs will actually be reduced as a microform collection for back issues of periodicals becomes more acceptable (cf 4.9). Compact storage of machine-readable records, videotape, videotex and videodisks will never assume a large portion of collection space in university libraries, but allowance for such facilities will have to be made.

The library collection has traditionally been organized and



separated by format with separate rooms or floors, and different access points. These different collection formats will nevertheless require flexible planning by libraries to organize the collection and eliminate wasted space. Flexibility to move the collection within a building will be needed in the future university library's technologically advanced environment. Collection access will also have to be reviewed since Beckman foresees that the "card catalog will either disappear or will cease to grow and provision for its eventual replacement should be made" (1983 : 283). Users will require decentralized catalogue terminals or microfiche reader stations throughout the building in order to have greater access to the collection.

#### 2.3.4.3 Staff Space

The once important position of the library catalogue in close proximity to the technical services section of the library is no longer crucial. In fact, with online and microform catalogues, library staff can catalogue from anywhere in the library. The introduction of new technologies and networks means that library staff space requirements have increased. As terminals, modems printers and microcomputers become standard equipment for many library staff, so "larger space allocations for each staff member must therefore be assumed, particularly ... as each cataloger requires a terminal in addition to the classification and authority tools which now surround the work station" (Beckman, 1983 : 283).

### 2.3.5 Special Features

The new technologies - particularly those of computers - will have a tremendous impact on library buildings in terms of the changing functions and functional relationships, and mechanical/electrical/structural considerations and require a "sensitive response to user needs" (Beckman, 1983 : 281-4). The requirements of installing a computerized system and planning for audiovisual developments are exhaustively dealt with elsewhere by Edwards (1987 : 16-21) and do not need expansion within the scope of this study. However, specialized facilities in so far as they concern undergraduate students will be examined more closely.

Included in the university library design should be some teaching accommodation which can be used for seminar work. This is useful for material which may not be removed from the library (for example, reference works for library and information science students, or archival and historical manuscripts for history students). There are strong arguments according to Fairhurst in favour of equipping such a seminar room with " ... a full range of audio-visual aids, particularly if the library is also the university's repository for slides, films, records, tapes and videotapes" (1965 : 111). User education, orientation and instruction on how to use the university library (cf 4.5.7) are specialized functions which demand specialized facilities within the library building. Videotex services, and videotape reviewing or viewing will similarly require special facilities. The group study room is considered by Edwards to be especially helpful as students sometimes like to work together in small groups (1987 :

20).

Libraries are often subjected to the use of part of the library building space for extraneous academic functions (Orne, 1976 : 322). They have been known to contain "the language laboratory, the computer laboratory, and even the central studios for the university's closed-circuit television system" (Fairhurst, 1965 : 111).

On occasion even the university bookshop has been incorporated into the library building. A 'browsing room' is another device used by libraries to encourage extra-curricular reading (cf 4.3). Specialist functions such as a bindery, an undergraduate wing (cf Chapter 5), university archives or even a special collection may be housed in a library building.

Provision for disabled student users is fairly common, such as rooms for blind readers, ramps instead of steps, use of lifts and in some, grab bars in enlarged cloakrooms (Kuhn, 1969 : 205). In some libraries coin-return lockers are provided for students and inevitably the coin-operated photocopy equipment which is always much in demand (cf 4.10). In some of the newer libraries in the United States house phones have been strategically located for students seeking staff assistance (Kuhn, 1969 : 203).

Librarians should also be aware that using a library can be a time-consuming business for a student, and so there should be good guiding and arrangement of stock, clear indications of what resources are available and where the catalogues are situated.

"Directories, visual sign devices, and publications deserve special attention" (Kuhn, 1969 : 203) (cf 4.5.7.6.2).

All of the special features and functions indicated above, contribute to enhancing library provision for users—particularly undergraduate users, and help make a student's visit to the library "potentially more valuable and purposeful" (Wilson, 1978 : 282).

#### 2.3.6 Summary

The environment of libraries is changing, as is the environment for research. The library building must therefore provide for the needs of its own staff and students and accommodate the changes of the new technologies. The library planner must ensure that the library design, the "size and type of spaces required, as well as the furniture and equipment they contain, or are likely to contain" (Edwards, 1987 : 20) can adapt to change. As Metcalf states "A poor building can seriously handicap students and professors; a good one can contribute to the intellectual health of the whole situation" (1965 : vii).

#### 2.4 COLLECTION DEVELOPMENT

One of the primary factors upon which the quality of a university library's services will be contingent is the size and range of its total collection and its constituent parts. Regardless of the mere size of the collection, however, the soundness of the

selection and maintenance procedures underlying its growth is of crucial importance in ensuring the stable development of the collection and hence in successfully supporting the educational role of the library.

Eave has defined 'collection development' as "a comprehensive phrase embracing the three major activities involved in the maintenance of library collections. These activities include the selection of library materials, evaluation and weeding" (1979 : 3). Using the breakdown by Eave into the three activities, we shall examine each in turn, but before doing so it will be necessary to consider what is meant by a collection-development policy.

#### 2.4.1 Collection-Development Policy

In 1979 the ALA Standards for university libraries recommended the formulation of a collection-development policy (cf 3.3.1 standard B.2) to guide libraries in the selection and acquisition of material. In 1977 the ALA Collection Development Committee had already published Guidelines for the formulation of collection development policies (A.L.A., 1977 : 40-7) which advocated the desirability of a written collection-development policy statement. Librarians can ensure that the collection will have been planned and developed in accordance with the objectives of the university library and its available resources, only after having established a well-defined, consistent collection-development policy (Thomas, 1985 : 230).

The elements constituting the content of collection-development policy statements have been outlined by Bender (1979), Danton (1963), Osburn (1979) and Rice (1977). Fundamental to all their prescriptions as to what aspects a collection-development policy statement should include, is the insistence that it should :

- a. provide direction and scope;
- b. spell out the objectives, functions and modus operandi of the collection-development unit; and
- c. indicate the type and level of material that is to be acquired by the library.

In addition, the policy statement should ensure :

- a. a balanced development of the collection;
- b. adequate coverage of material in all formats;
- c. appropriate quality and quantity of the collection;
- d. systematic evaluation and weeding; and
- e. the speeding up of the process of acquiring library materials.

Ehikhamenor maintains the policy should also cater adequately for the following levels of needs :

- a. 'a core collection which all university libraries should have regardless of their educational programmes';
- b. 'a collection to support undergraduate instruction';
- c. 'basic research collections to support graduate programmes'; and
- d. 'comprehensive research collection to support advanced research ' (1983 : 150).

According to Atkinson, the collection-development policy fulfills three basic functions : the referential, the generative and the rhetorical. These three functions are closely related and are a means of expressing and systematizing guidelines for collectionbuilding. If the collection policy is divided into subject categories and collection levels, viz. A. (Comprehensive), B. (Research), C. (Study), D. (Basic), and E. (Minimal) and these are used to rank the collection, they contribute to the policy's essential functions (1986 : 140-9).

Once a collection-development policy has been formulated, the onus is on the university library to ensure that it is accepted and endorsed by the academic staff and administration, and well-publicized.

#### 2.4.2 Selection

By and large, the academic staff have traditionally assumed chief responsibility for collection building at most libraries in the countries examined, with library staff selecting reference material, professional 'bench books' and cross-disciplinary material not specifically recommended for acquisition by the teaching and research staff. Such dominance by academic staff of the book selection process has occurred as a general rule regardless of the size of the library, and whether or not the materials selected have been intended for undergraduates, graduates, or researchers (Gardner, 1985 : 140).

American acquisition policies and practices which were developed

in the nineteenth century were modelled closely on those of German university libraries, according to Danton (1963 : 30). It was (and in many instances still is) common practice in these latter libraries to turn over the available book funds to the various faculties and faculty liaison committees for selection purposes. Such practice in turn was to become the prevailing pattern in American university libraries - an approach widely adopted even today.

The reasons why academic staff have traditionally been granted principal responsibility for selection are possibly based on what might be referred to as interested assumptions or even 'myths' :

- a. teaching and research staff know the literature of their own subject fields best;
- b. only they can identify those materials most appropriate for their own study and research needs; and
- c. teaching staff are best prepared to select course-related materials (Gardner, 1985 : 143).

Page, on the other hand, maintains that the reason "is primarily because many faculty members do not have a high opinion of the capabilities of library staff" (1977 : 317).

Gardner contends that in smaller academic institutions (e.g. American colleges) the emphasis lies on undergraduate instruction as opposed to research. Hence the academic staff of such institutions are essentially teachers rather than researchers. Such staff are more devoted to undergraduate teaching than to scholarly pursuits, and consequently their personal research



needs are less than those of their colleagues teaching at institutions with more extensive graduate enrollments. At colleges the pressure to publish is less intense and hence the need for library materials is much more modest there (1985 : 143).

In academic departments where the staff complement is small (consisting typically of two, three or four persons) :

... it is impossible to expect of even the most knowledgeable and diligent faculty currency in all subfields of their respective disciplines : Yet departmental allocation of book budgets assumes this by making them responsible for broad subject areas (Gardner, 1985 : 143).

The results of Millson-Martula's investigation as to whether academic staff or librarians make the more effective collection decisions, indicate roughly equal effectiveness in selection activity. While academic staff may know what students need in terms of assigned reading, Millson-Martula concludes that the selections made by libraries have the general advantage of adding breadth to the collection while academic staff tend to "provide the collection with a greater degree of depth in relatively few subject areas" (1985 : 507; emphasis added).

Academic staff are sometimes out of touch with what students actually use in the library. Actual student needs and usage of the library however, it is claimed, are often quite different from the needs perceived by lecturing staff. Librarians' awareness of student needs - as evident from circulation records and informal student-librarian relationships - confirm what

students actually use in the library (Gardner, 1985 : 144). (Such empirically-based awareness on the part of librarians are of course not necessarily indicative of what may well be educationally desirable in the view of lecturers.)

The traditional limiting of library staff to 'filling in the gaps' and the related question as to which of the two professional groups can most effectively select materials for the collection began to be questioned during the 1950s by Bach (1957 : 441-51), Fussler (1953 : 365) and Thornton (1953 : 371). During the 1960s bibliographers and subject specialists began to be appointed at American and British university libraries (Edelman & Tatum, 1976 : 236). In fact, by 1967 as many as 69 per cent of large libraries in the United States were using such staff (Haro, 1967 : 104-6) (cf 4.4). In South Africa the first subject specialists were appointed at UNISA in 1966 where they were referred to as subject reference librarians (Williams & Poller, 1972 : 264-71).

The paucity of attention given to the effectiveness of selection became cause for concern among librarians who appreciated that the collection constitutes one of the largest financial investments and possibly one of the major educational resources of any institution. American university librarians also began to question at that time the quality of the book selection decisions made. They observed :

... faculty disinterest, a tendency for faculty to select avidly only in their own narrow fields of study or areas of special interest, the laziness or procrastination of a few, and the inevitable gaps and

weaknesses that result from inadequate coordination of acquisitions (Gardner, 1985 : 144).

Among those who questioned the conventional wisdom that primary responsibility resides with academic staff are Schad and Adams who advocated shared responsibility between academic and library staff (1969 : 437-42). The notion of responsibility for the selection of material being shared in this way has often become the cornerstone of the acquisition policy in most larger libraries in the United States (Gardner, 1985 : 142). The allocations for subject areas are now as a rule jointly administered by the library and academic departments. Hellinga has noted though, that smaller university libraries tend to rely more heavily on academic staff as book selectors because they do not have the staff to keep abreast of all fields (1979 : 82).

However, a completely different viewpoint has been put forward by Miller and Rockwood who assert that librarians of smaller academic institutions should :

... secure control of their acquisitions budget if they do not already have it. In too many colleges, academic departments control and expend their budgets to no discernable criteria (1981 : 144-5).

This is contrary to prevailing trends in collection management activity, if library literature is an accurate indicator to go by (Millson-Martula, 1985 : 504). The pre-eminence of shared responsibility is an inevitable response to inflation, declining or stable student enrollments, revised curricula and other factors such as professional responsibility, which obliges

librarians to assume selection leadership. Gardner urges a re-evaluation of the role of academic staff in the selection process, which he sees as the responsibility of library staff, aided and assisted by academic staff, and not the other way around (1985 : 144-5).

As all libraries receive a large quantity of publishers' publicity material, they can influence selection by academic staff through distributing it amongst them. Academic staff may themselves receive a more limited supply direct from publishers. The added stimulation of distributing book reviews - by photocopying reviewing sections of journals and sending these to academic staff - may be a useful help in selection. The use of booksellers' on-approval services is another method of assisting academic staff in improving selection (Page, 1977 : 317).

Students do not on the whole make much of an impact on a university library's book selection process. Most libraries do accept recommendations from students but tend to consider these more critically than those received from other sources (Durey, 1973 : 325). While staff attitudes influence student usage of a collection, the construction of the collection must be tailored to the educational needs of the whole university. So it is important that part-time academic staff who are employed for teaching evening classes also participate in collection development since they seldom if ever submit recommendations for purchase (Talmadge & Kidman, 1962 : 525).

In accordance with the ALA Standards for university libraries,

librarians must on the one hand involve academic staff in the joint acquisition recommendation process and on the other, convince the university administration of centering selection responsibility within the library. A written acquisitions policy placing financial and collection quality accountability with the librarians would support the library's hand in such matters. An example of such a policy is the evolution of allocation guidelines at the University of Cape Town Libraries (U.C.T.). Eave reports that in terms of the broader concept of collection development, the recommendations include :

- a. 'the formulation of collection-development policy statements for each subject area';
- b. 'evolution of reference librarians into subject librarians and their inclusion in departmental library materials selection committees';
- c. 'funding of the reference/subject librarians so that they would be in a position to augment the selection done by the academics and/or departmental selection committees';
- d. 'evaluation and, if necessary, weeding of stock';
- e. 'careful scrutiny of all requests for back runs of journals'; and
- f. 'for U.C.T. to explore ways and means of co-operation with other institutions, particularly those in the Western Cape, and to participate in any national network system which might be developed' (Eave, 1984/85 : 67).

In March 1983 a Sub-Committee of the UCT Library Committee was appointed to investigate collection development. The Sub-Committee elicited collection-development policy statements from

108 departments, and a questionnaire drawn up by the Subcommittee was discussed with each head of department, or his nominee, by a member of the library staff. The reason for this was to ensure consistency and full, accurate responses. The questionnaire covered the following elements inter alia :

- a. 'curriculum coverage';
  - b. 'research activities, both current and anticipated';
  - c. 'language chronological, geographical parameters';
  - d. 'co-operative ventures both within and without the university';
  - e. 'estimated funding needed to upgrade and maintain the collection'; and
  - f. 'identification of journals consulted by academics'
- (Eave, 1984/85 : 68).

Each department was supplied with the relevant pages of Chapter 2 of SAPSE Report 003 entitled South African classification of educational subject matter to assist them in identifying subject areas against which they could indicate their levels of collection intensity. The statements made by the academic staff were transcribed onto floppy disks so that they could be easily up-dated. This analysis of journals was useful for two reasons. Firstly, it enabled the library to ascertain the number and proportionate cost of the periodicals on a departmental basis, and secondly, it identified those titles which were not being consulted and which therefore could be cancelled. Although time-consuming, the exercise demonstrated the inter-dependence of collection development and allocation guidelines (Eave, 1984/85 : 68).

The realization that it is impossible for university libraries to be self-sufficient, has resulted in a willingness for libraries to cooperate with other libraries and to try to work out a scheme to rationalize collection development among them (Peel, 1977 : 191). The severe economic climate of the 1970s precipitated a crisis in the United States in collection development in university libraries. Libraries were forced to address themselves to rationalization, as towards the end of the decade the crisis worsened considerably. The rate of inflation for library material outpaced the average rate of inflation for all consumer goods and services during the period 1967-1982 (Leach, cited in Bentley & Farrell, 1984 : 321). Libraries introduced stringent measures to rationalize their budget allocations, including massive cancellations of periodicals. However, it became apparent that ad hoc solutions were not enough and libraries undertook to draft new collection-development policy statements based on regional cooperation (Bentley & Farrell, 1984 : 321-25).

Those libraries in the United States who were members of the Research Libraries Group, Inc. (RLG) created a new evaluation tool in their RLG Conspectus. The RLG Conspectus serves as a basis for assigning primary collection responsibilities as well as a summary arranged by subject, of existing collection strengths and future collecting intensities of RLG members. It is also a location device for collections considered to be national resources (Gwinn & Mosher, 1983 : 128-40). The Center for Research Libraries (CRL) collection-development policy is another example of a cooperative scheme which is assisting libraries in North America with rationalization. Thomas reports that both CRL

and its members stand to realize substantial savings through a cooperative policy of cancellation of duplicate holdings. However, if the Center is to succeed in reducing the extent of overlap from its collection to the holdings of its members and concentrate on those items that complement its members' collections, "members must support policy decisions that have occurred through consensus" (1985 : 235).

Another successful effort to develop a common acquisitions programme was the Canadian TRIUL (Tri-University Libraries) rationalization programme in British Columbia in the 1970s. The success of this consortium can be attributed to the close proximity of the three university libraries involved in the programme (Peel, 1977 : 192). The economic and technological factors facing libraries have combined to make resource sharing an inevitability for university libraries (Holicky, 1984 : 146-7). Even coordination in rare book acquisitions among neighbouring university libraries is a possible alternative for libraries with static or declining budgets. A cooperative rare book collection-development programme divides acquisition responsibilities among libraries. Smith describes the success of such a programme at the University of North Carolina - Chapel Hill and the University of North Carolina - Greensboro, where both librarians "feel that the value and usefulness of their special collections have been enhanced by the agreement" (1985 : 166).

In South Africa, since October 1986, a project under the auspices of the Committee of University Principals (C.U.P.) has been investigating "groter rasionalisasie en samewerking tussen



universiteitsbiblioteke in Suid Afrika. Daar word spesifiek gekyk na rasionalisasie en samewerking ten opsigte van versamelingbou en dokumentlewering" (SAILIS, 1987 : 1). The project team comprises Professors ED Gerryts and H de Bruin, and "is nou besig om sy finale verslag vir die K.U.H. voor te berei" (SAILIS, 1987 : 1).

When it is necessary that every rand spent is stretched as far as possible, it is essential that greater attention be given to who exercises the selection of materials for a university library, that indiscriminate book buying is eliminated, that written acquisition policy statements are formulated, as well as collection development being rationalized on a regional basis.

#### 2.4.3 Evaluation

Ongoing collection evaluation is crucial to the maintenance of a strong up-to-date academic library. The evaluation of a collection may involve four methods according to Hirsch, viz. :

- a. 'keeping circulation statistics';
- b. 'the 'impressionistic' scrutinizing of the actual stock';
- c. 'comparing holdings with checklists or bibliographies';
- and
- d. 'measuring expenditure on library materials' (1959 : 7-20).

Evaluation may also include examining the data on actual holdings, such as gross size, although the development, maintenance and exploitation of a collection are much more

important. Other evaluation techniques would include looking at the number of annual additions to the stock, comparisons done within a library at different times, subject balance and unfulfilled requests, including those channelled through inter-library loans (Bonn, 1974 : 265-304).

#### 2.4.3.1 Circulation

The usage of a book can indicate its value to the collection. In his recent study of circulation activity, Millson-Martula found that items not used in the first three years after their addition to the collection are not likely to be used in succeeding years (1985 : 508). Most research indicates that the probability of a book being used declines with age. Webster even contends that "if a book is not used once in its first seven years in a library, there is a less than one percent chance that it will ever be used" (1977 : 24).

A study by Hodowanec also revealed the rate of circulation of new items drops off at a rate of approximately one-half of the previous year's circulation. He also found that course-related materials circulate more frequently than books which are not related to the programmes offered. Hodowanec concluded that only a fraction of the collection meets the majority of users' needs, and consequently that while the collection size grows, the corresponding circulation per student does not increase at the same pace (1978 : 439-47). This reinforces the assumption by the ISI that 90% of all academic needs of American universities for journal articles are satisfied by an identified core of journal

titles listed in the annual ISI indexes.

In a later study, Hodowanec observed certain general, repeated patterns of circulation rate in books from all subject classifications from the time of acquisition to the time of least circulation. Those responsible for collection development can review an academic collection and use an analysis table based on circulation to show the varying degrees of dispersed use. The use-support relationships are dynamic, changing as university emphases change. Hodowanec was not prepared, however, to determine the minimum size of a core collection or specify the number of titles that should be acquired in any specific subject area, since such quantitative determinations are often based on

... subjective judgements from librarians, taking into account the existing size of the resources in a particular subject area, the level and depth of the instructional program, the overall goals of the university (1983 : 431).

Hodowanec believes that the decision to purchase a specific number of titles in a particular subject area should be based not only on use-related factors but also on the number of titles being published in that subject area. A study of circulation patterns suggests that a 'basic' or 'core' or 'essential' collection should be developed after a number of integrally related use factors are reviewed, rather than developed around arbitrarily specified numbers of volumes per student. Circulation data can reflect a local library's use patterns and patron needs as effectively as a librarian's knowledge of actual patron use and of the strengths and weaknesses in a collection. The

circulation data can also reveal where books acquired on the basis of perceived potential use, not on the basis of actual curriculum-supporting use, show a regular growth in circulation (Hodowanec, 1983 : 421-43).

Obsolescence is also dealt with by Hodowanec who explains the general obsolescence pattern as consisting of three elements :

... first, a high point of use sometime within the first four years after an item's acquisition; second, a decline in use over a period of years (roughly ten to fifteen years) until a low point of use is reached; and third, a period of relatively steady, low use lasting, as found in this study, at least through an item's twenty-second year of shelf life (1983 : 439).

The Acquisition Priority Weighting (APW) formula which Hodowanec puts forward was developed by the analysis of such factors as immediacy and intensity of peak usage, use dispersion and the commonality of use. The APW formula can provide objective guidelines for the bulk of collection development decisions, decisions that must fit the most useful books requested into limited acquisitions budgets if adapted to the curricular programme of an individual library. If academic libraries follow prioritized potential-use patterns in apportioning their book budgets, they would proportionately allot the first half of available funds to subject areas showing the first half of expected book use, allot the first two-thirds of available funds to subject areas showing the first two-thirds of expected book use, and so forth. Hodowanec concludes that a sound collection can be developed in support of local-use patterns and demonstrated patron needs (1983 : 438-9).

#### 2.4.3.2 Scrutinizing Stock

The usefulness of this method of stock evaluation depends largely on the calibre of the personnel employed in this task and their competence (Eave, 1979 : 24).

#### 2.4.3.3. Comparison with Checklists or Bibliographies

Standard catalogues and lists of 'best books' are published regularly and widely used. In developing a collection the use of a model has always been an important factor and some comprehensive and selective tools aid in book selection. It is possible by using such lists to compile an initial list of items for purchase without resource to largely nonselective publishers' catalogues, booksellers' lists and publishers' blurbs.

In selecting subject material, individual subject bibliographies have been used such as the Harvard list of books in psychology or the Mathematical Association of America's Basic library list, with much success. Academic staff merely adding their own recommendations to the selections in the lists (Horny, 1971 : 1581).

Among the most well known is the Catalogue of the Lamont Library, Harvard College, prepared by Phillip J McNiff (Harvard University Press, 1953), The University of Michigan Undergraduate Library Shelf-list, Books for College Librarians compiled by Melvin J Voigt and JH Treyz (A.L.A., 1967) and Choice, the periodical published by the A.L.A. since 1964.

In addition, Princeton's Julian Street list compiled by the Julian Street Library has been described as a good working collection for undergraduate students. Its merit as a selection tool, according to Dix, was as a 'starting point' and not intended as a list of the best 10 000 books for undergraduates (1969 : 17). Another example of a useful checklist at the time was the Ontario New Universities Library Project (ONULP) which was established in 1963 to compile a list of 35 000 volumes, designed to serve as core basic college library collections for five new universities in Ontario, Canada by 1967 (Bregzis, 1967 : 495-508)(cf 5.3.3).

The 'Great Books Program' founded in the 1920s in the United States also generated a book list. The Great Books Program was basically an educational movement to encourage reading and discussion of a reading list of great works of Western literature. There are many different lists of 'great books' which are works "considered the best written original communications of perennially significant insights into man and his world" and reading such works was considered one of the best ways of acquiring a liberal education (Encyclopedia of Library and information science, vol.10, 159-79). Such lists of great books also serve as book selection tools.

In the light of the prevailing view that university libraries should be a place where a student can satisfy both his curricular and extra-curricular reading requirements (cf 4.3'), booklists like those mentioned above, help the librarian select materials that upgrade their collection and make it "more vital to the

undergraduates' interests (Veit, 1976 : 364).

#### 2.4.3.4 Measuring Expenditure on Library Materials

Evaluation of the collection includes the gathering of statistics and measurement of the collections in terms of gross size, acquisition rate and student enrollment.

##### 2.4.3.4.1 Gross size

The most distinctive feature of modern university libraries is their size. Book collections of hundreds of thousands and even millions of volumes are the order of the day. Rider showed that until 1938 the average university library in the United States had been doubling at the rate of once in sixteen years (cited in Ratcliffe, 1980 : 10). Later statistics indicated that this rate had dropped. The increase is now well below three per cent per annum and likely to be reduced further in the years ahead. Finance, use of microforms and other mechanical devices have contributed to the reduction in the rate of growth of libraries. If a book collection in a large library increases more than two and one-half per cent per year, Radcliffe pronounced, it is growing more rapidly than it should (1980 : 10).

The old idea in libraries was to collect everything, and is supported by an article written in 1972 by Redmond, Sinclair and Brown which argues that the demand for library material is potentially limitless (1972 : 447-53). Currently it is no longer fashionable for university libraries to be preoccupied with size

(Roberts, 1977 : 464). The emphasis would appear to be on growth rates rather than ultimate collection size (Voigt, 1975 : 264).

In 1965 Clapp and Jordan asked what the minimal adequacy of a collection was - in other words, when might a collection be considered adequate? (1965 : 373). They used criteria (derived from data such as those related to an undergraduate library, undergraduate, graduate and doctoral disciplines and fields of specialization) which are based on the general idea that all books contained in basic bibliographies should be part of any academic library. The basic collection suggested consists of 35 000 titles (42 000 volumes), 250 current periodical titles (3 750 volumes) and 5 000 documents, thus constituting a total core of 50 750 volumes (1965 : 374). This, according to Moran, is a kind of generalization or composite taken from catalogues of noted undergraduate libraries. Hence he queries its value, and wonders whether this implies that the undergraduate library of 50 750 volumes would be composed (by chance? by design?) 'of these recommended books' (Moran, 1978 : 88). Moran cautions that :

... any abstract formula that presumes to tell a university library how many books it ought to have is foredoomed to failure as a measure of the library's educational role in the university, through not necessarily a failure as a financing tool (1978 : 90).

Snowball, in turn, has also criticized Clapp and Jordan for their lack of provision for the factor of obsolescence by not including a 'devaluation' factor related to the age of the volume in their formula (1972 : 487-8). Deterioration in a collection must be one of the most serious problems facing libraries today because of



chemical composition of paper and the effects of uncontrolled environmental conditions, and must be taken into account when determining the real size of the collection. In a recent study at Yale University Library it was found that 37,1 per cent of books sampled had brittle paper (i.e. broke after two double folds) and 82,6 per cent of books had acid paper (Walker, Greenfield, Fox & Simonoff, 1985 : 111-32). Such deterioration in a collection significantly affects the number of obsolete volumes. Preservation efforts (as well as on-going collection evaluation) are crucial to the maintenance of a strong, up-to-date library collection, which the student is likely to find useful. Libraries should not be concerned with size per se (Veit, 1976 : 365).

Librarians in a university library must also be able to calculate the number of titles in a specific discipline. This allows the librarian to estimate the probability that a student or academic staff member will be able to find the title he or she will need in that discipline, in the library. This figure is used by the library and university administration in some institutions to determine budget allocations (cf 2.4.2 U.C.T. allocation guidelines). In estimating the size of a collection, the standard technique has been to equate classification number to specific academic disciplines and count the number of titles in a collection which have been assigned the classification numbers. This method is known as a shelflist count, and according to Saunders, Nelson and Geahigan, is not a reliable measure of the number of titles in a certain discipline. They propose two alternative measuring techniques for obtaining the needed information, as they found as high as 70 to 80 per cent of titles

which were not classified in the relevant classification number for that discipline. They suggest various sampling methods using experts' definitions of what titles are in a field to determine the size of a collection (1981 : 383-91).

Whatever the size of a collection it should be adequate to provide for the basic needs of its users and particularly - in the case of university libraries - its undergraduates. Two libraries of similar size can be two very different institutions reflecting different "choices of selection and services" (Pennington, 1985 : 127). It is essential that librarians acknowledge these variations and ensure that the size of the collection is such as to give an adequate coverage of the available literature in each discipline.

#### 2.4.3.4.2 Acquisition Rate

Since Rider traced the growth of library collections and found that they double in size every 16 years (1944 : 9), librarians have been interested in the phenomenal growth of library collections. The 'Purdue studies', first published in 1965, forecast libraries' future acquisition rates based on prior acquisition statistics. The Purdue findings were, until 1980, generally accurate in terms of collections and some expenditures, but not with acquisitions. Purdue had forecast average acquisitions of more than 225 000 in 1980. The predicted acquisitions did not materialize. Seibert contends that library growth is a social phenomenon and suggests that library statistics, status and behaviour should be closely monitored to

determine acquisition rates (1985 : 19). Seibert also believes that library growth will continue during the years immediately ahead, but possibly decelerate "because of recent and perhaps continuing declines in library acquisitions" (1985 : 22).

A replacement of 10 per cent of the book collection each year is recommended by Randall if the average age of the titles is to be less than ten years old. If an acquisition rate of 6 per cent is followed, then 90 per cent of the collection can be replaced in fifteen years (Randall, 1976 : 8-12). In 1975 Voigt recommended that a university library, which offers doctorates in three major languages, three social sciences, the four main sciences and in history, psychology and philosophy, should have an acquisition rate of 40 000 volumes (1975 : 263-71).

Libraries facing a no-growth budget situation and a rapid escalation in the cost of periodical subscriptions, will be able in the future to compare one another more and more in terms of a nil acquisition growth rate.

#### 2.4.3.4.3 Student Enrollment

The size of the student body is considered by Voigt to be a fallacious argument in estimating acquisition rates and library size (Voigt, 1975 : 263-71). However, the dramatic rise in the number of students attending university has required that large numbers of duplicate copies be purchased. The UGC suggested "the duplication of minimum book needs for each undergraduate course on a scale depending upon the number of students involved (1964 :

8).

Where there has been a rapid increase of students, users are frequently frustrated by the unavailability of books. Smith and Granade felt that low rates of availability could be rectified by modified loan and duplication policies (1978 : 468) (cf 4.5.3). Higham believes in providing multiple copies of books in demand but also in varying their availability. He also contends that "The mere provision of multiple copies is wasteful of resources, especially in times of financial stringency" (1976 : 27-8).

Some university libraries try to increase the number of duplicate copies of a book by having separate funds for the duplication of students' books (Page, 1965 : 348). Various formulas are used by libraries to determine the number of copies of a book necessary for all students in a particular class or course to use at more or less the same time. The formulas are normally based on the number of students in the class. Such a formula is complicated by the length of time available to the students and the length and readability of the books themselves (Page, 1977 : 322). Where multiple copies are purchased, problems are encountered if a book in heavy demand one year might not be heavily used the next, or when a new edition appears, the multiple copies become obsolete (Grant, 1971 : 69).

Eave reports that some South African university libraries earmark separate allocations for the purchase of multiple copies, while others order duplicates from academic department accounts or a general fund. A formula is used by some libraries to determine

the number of multiple copies, which Eave indicates is as follows:

At U.C.T., the ratio is 1 copy per 30 to 33 students; at Pietermaritzburg it is 1 : 50 students; UNISA monitors the demand via its computerised issue system and orders accordingly. Stellenbosch imposes a maximum of 6 copies, irrespective of the size of the class; U.P.E. has a limit of 5 copies and the Medical Library at the Durban campus does not buy in excess of 4 copies (1979 : 133).

It is often impossible to purchase multiple copies of books because of a restricted budget, so teaching staff tend to rely more and more on textbooks (Moss, 1966 : 96). Some university libraries have responded to the problem by establishing a non-circulating duplicate collection known as a 'core collection'. This would contain all the 'essential books in each discipline, and would be 'aimed' particularly at the undergraduate who is continuously confronted with "the problems of competitive use of the key books" (Horny, 1971 : 1580). In a study of duplication and collection overlap at the University of Wisconsin System libraries (July 1977- June 1979), it was found that levels of duplication were lower than expected averaging between 18 and 32 per cent, and the highly overlapped titles "do not appear to be a core of needed ... materials" (Moore, Miller & Tolliver, 1982 : 14-21).

The required size of a collection can also be affected by the size of the doctoral programme at a university and in Snowball's opinion may be of greater importance than the actual number of students, since "whether one or one hundred persons are involved, the same titles would be required" (1972 : 488).

#### 2.4.4 Weeding

Growth of collections is controlled by extensive weeding to maintain useful collections (Kuhn, 1969 : 199). It is essential to the viability of a collection that it is freed of out-of-date books, especially with the need for currency in a collection. If material which is no longer relevant is not eliminated, the collection loses its essential purpose, viz. to be pertinent to student needs.

Moss believes that a book collection should be in a constant state of flux. Mistakes are made in purchasing and such books should be removed from the collection. He even goes so far as to assert that no book need be a permanent part of a collection, although certain titles basic to a 'liberal education' should always be there. Worn-out, mutilated books should be withdrawn- the collection changing and growing with the curriculum (Moss, 1978 : 391).

The Slote method of measuring past use was shown by McKee to be effective in maintaining an active collection and in increasing circulation, (The Slote method assumes that past use is the best predictor of future use.) McKee also tested Slote's assumption that weeding increases use and found that a strong positive relationship exists (1981 : 283-301). Therefore, librarians should keep their collections 'alive' and give as much attention to discarding material, as they do to acquiring new material. A book collection, according to Dix, must be "weeded constantly to reflect fluxing curricular needs of the institution" (1969 : 65).

#### 2.4.5 Summary

Overall collection development plans, user demand and budgeting should all play equal roles in determining selection. The collection development process should be a collective process using the expertise of librarians and academic staff. Since collection development has been beset with diverse problems - dwindling budgets, rising cost of materials, and escalating periodical subscription costs - the limited funds available must be carefully managed to achieve the optimum levels of collection adequacy.

#### 2.5 STAFFING THE UNIVERSITY LIBRARY

The character of a university library and its significance depends to a large extent on the personnel who work within the institution, and whether they consider service as central to their activities. Kesting put it more explicitly when he said "Dit bly aksiomaties dat goeie personeel die siel van die doelmatige biblioteek is" (1967 : 149).

The whole range of library workers contribute to the level of effectiveness of a library. Likewise, the quality of the staff affects the effectiveness of library staff, for as Revill maintains "It is the quality of the library staff, not simply the quantity of books or even the size of the book fund, which ensures the success or otherwise of the library" (1981 : 106).

When one considers the size of a university library's staff, the range of services they offer, the expenditure on salaries involved, one is faced with a very large-scale operation. The situation is made even more complicated by the fact that staff, like the book collection, may be scattered in branch libraries or spread across the campus.

Initially, academic librarians in the United States and Great Britain had little, if any, formal training in librarianship. Most were appointed on academic merit rather than formal professional qualifications. Support staff too, were untrained. The change came in the late 1930s in the United States, and between 1950 and 1975 in Great Britain, as professionally qualified staff increased rapidly (Thompson, 1980 : 2). Inevitably, with the increase in library staffs, there was a shift in professional emphasis from book processing to reader services.

The members of staff of academic libraries are generally divided into two categories : professional and non-professional staff (Gelfand, 1971 : 54)(cf glossary in Appendix I). Although the ALA Standards for university libraries commentary on standard C.1 concerning personnel states:

A university library should have on its staff a variety of personnel : professional, clerical, and student-assistant staff (cf 3.3.1).

The issue over what constitutes professional as opposed to non-professional work dates back to the 1920s when Coulter argued in



favour of differentiation of duties (Downs, 1976 : 496). Asheim believed that job descriptions and job classification schemes needed to be revised "to more fully utilize the particular talents and qualifications of every staff member (1967 : 1795), while Bundy and Wasserman observed that many librarians were not employed in positions for which they were trained (1968 : 17). Changes in levels of work have in recent years come about "more from the impact of technology and funding cuts than from serious research into the nature of work roles in libraries (Gould, 1985 : 236).

As new technology forces librarians to adapt to the changes, staffing patterns will also be altered. Veaner forecasts that in the 1985-95 decade there will be :

- a. 'fewer cataloguers ... materials will be cataloged from electronically transmitted facsimile copies';
- b. 'fewer clerks, as more academic library routines, eg. circulation and acquisition ... fall into ... standard software packages';
- c. 'reduced interlibrary loan staff as commercial document delivery systems ... gain popularity and deliver materials directly to the user'; and
- d. 'shifts of some librarians to the computer center ... for work on information systems design' (1985 : 222-3).

The librarian of the future will, in Hendrik's view become "a person of thirds - one-third administrator, one-third teacher and one-third research" (1986 : 129). Technology will reduce manual labour and free librarians to become both more of a generalist

and a specialist (cf 4.4 and 4.5.7.8).

#### 2.5.1 Professional Staff

Professional library personnel (cf glossary in Appendix I) for the definition used in this investigation) should have :

A good liberal education plus graduate-level study in the field of specialization (either in librarianship or in a related field) are seen as the minimum preparation for the kinds of assignments implied (ALA, 1970 : 343).

In the commentary on standard C.1 of the ALA Standards for university libraries mention is made of the educational requirements of library personnel :

The recognized terminal degree for librarians is the master's degree from an American Library Association accredited library school program, although additional graduate degrees may sometimes be desirable (cf 3.3.1).

It should be pointed out that the degree of Master of Library Science in North America stipulated for librarians is what Radford refers to as "the base level professional qualification awarded at the satisfactory conclusion of a one-year postgraduate course taken by holders of at least the bachelor's degree, the latter being conferred at the end of four years of tertiary study" (1977 : 501).

If a university library has staff who are academically orientated and evince an interest in a wide range of disciplines "undergraduates can be helped in a stimulating way and expert

knowledge can be applied to the task of building up the university's collection" (UGC, 1964 : 2).

Senior library staff should have several years appropriate experience - additional qualifications may be necessary for certain positions in a library. Amongst some of the qualities a professional librarian needs to have are :

- a. 'enthusiasm';
- b. 'an ability to communicate clearly and effectively'; and
- c. 'friendliness and helpfulness, patience and humility'

(Stevenson, 1977 : 63).

Sometimes librarians create an image of being too rigid, meticulous and precise. Bolton suggests "A genuine effort by the library staff to evince flexibility and creativity will enhance performance and dispel the idea that librarians are suffering from administrative arthritis" (1971 : 18).

In addition, the professional librarian must at all times be approachable and willing to become an active member of the institution he or she serves - prepared to establish programmes of user education. The image of librarians is vital as Stevenson sees it "in this respect the key resource is the librarian and much depends on his attitude and motivation (1977 : 63).

Stevenson also cautions librarians about the use of library jargon in relation to users. In his view :

One of the things that has gone towards creating the not very flattering image of librarians in the minds of the user is the use of discipline-oriented terminology or jargon, of which librarians are so fond. This only perpetuates the mystique of the profession and creates a barrier between librarian and user (Stevenson, 1977 : 63).

Professional library staff are involved in a most complex management operation and Bailey warns that "librarians of the future must be budgeters and systems managers, and conflict resolvers, and priority selectors and superb academic politicians. They must be negotiators and compromisers" (1978 : 5).

Professional staff do not hold technical responsibilities alone. They hold supervisory and administrative roles but their major role in a university library is to teach students how to use the library efficiently. When it comes to professional recruitment, Vuturo believes there must be a reorientation; "the emphasis [must] be placed on the librarian/teacher and not on the librarian/ex-teacher" (1977 : 739) (cf 4.5.7.5).

As professional staff perform both professional and academic duties they should rank with academic staff. Revill has argued that senior librarians who are employed by academic institutions should be regarded as academic staff. He maintains that this would be justified because of the role the librarian plays as a teacher (1981 : 104-18). Indeed, senior positions in university libraries tend to be related to academic positions and as such staff accorded faculty status (Gelfand, 1971 : 57). Massman concluded in his doctoral dissertation that faculty status was

essential and added that librarians should participate fully in the educational enterprise (1972 : 29). Another aspect was highlighted by Spencer, who has argued that "If our concern is to ... place the library at the center of the academic community, several things are necessary - the first of which is that the librarians must be given unprecedented support and influence within the university" (1978 : 1022).

Brice also notes in this connection that "The librarian must be recognised as a colleague by teaching staff (1978 : 86). However, Knapp who characterized the role of the librarian in the political life of Monteith College, found that librarians were never fully accepted as members of the 'academic staff' : the latter "had no difficulty gaining acceptance from librarians" while librarians, had grave difficulties in being accepted as members of the 'academic staff' (Lynch & Seibert, 1980 : 136).

In 1971 Standards for faculty status for college and university librarians were adopted in the United States. Since then, there has been increasing concern that in order to justify their faculty status, academic librarians should write articles and conduct research. Montanelli and Stenstrom contend that one of the primary benefits of such research is improved relationships with academic staff (1986 : 483). It enhances the problem of credibility which librarians often confront, as Cook's findings suggest that academic staff maintain librarians do insufficient research (1981 : 214-23). Indeed, Hill and Hauptman assert that if librarians are to deserve faculty status they must comply with the standards of excellence which are similar to those of the

academic staff. They explain that "there are conditions under which a librarian deserves faculty status and these are precisely the same conditions for any faculty member at an institution : teaching, researching and publishing" (1986 : 159).

Controversy over faculty status of librarians arises not only from outside but also from within the library. In a survey conducted in the Rock Mountain region in the early 1980s, the results show that librarians had a dubious attitude regarding faculty status. Their complaints principally stem from the difference in time commitments (i.e. academic staff work for nine months of the year while library staff work for twelve months). The survey also revealed that the views of the librarians were frequently at variance with those of library management. "Almost invariably the directors hold a more positive view of the benefits of faculty status than do the librarians" (Davidson, Thorson & Stine, 1983 : 419).

In a paper by English it appears that pressure for faculty status may have 'run its course' and begun to move in reverse (1983 : 199-222). He also suggests in a recent survey (1984) that American university administrators see no advantages in librarians having faculty status and that little is expected of librarians by way of academic achievement; "professional competence, technical expertise and service are seen by administrators as the principal concerns of academic librarians" (1984 : 195).

The key to improving librarians' academic status may lie in

relinquishing some of the more routine aspects of the professionals' work onto support staff, since such 'housekeeping tasks' are identified with low status by academic staff (Veaner, 1985 : 209-29). Cieslicki reports in a six-year case study of the Dickinson College Library which began in the mid-1970s, that when faculty status was accorded professional staff, they responded to their new responsibility in various ways :

- a. 'they agreed to conduct themselves on the job as professionals - working as many hours as were necessary to maintain high quality service to meet the needs of students and academic staff - no longer thinking of a work week as a specified number of hours, but measuring their work in terms of the service rendered, projects underway and goals accomplished';
- b. 'they acted as liaison with several academic departments helping with selection of materials, offering course-related instruction and help in use of the library'; they began to direct pertinent materials to academic staff when they became acquainted with their research interests'; and
- c. 'they committed themselves to shifting internal assignments to broaden each member of staff's area of expertise, to diminish dependence on individuals thereby increasing the flexibility of the service provided' (1982 : 77-78).

Library services are therefore considerably enhanced by according faculty status to professional staff, whom Cieslicki concludes, have a greater degree of commitment to their work (1982 : 79). If librarians are required to do research it will serve to enhance

the service they already offer, as "librarians must not forget that the underlying reason for all [the] research we do is to help our clients, universities and the world" (Isaac, 1983 : 219). The benefits of faculty status are usually accompanied by new responsibilities, but it does mean that professional staff are seen as "equals and not merely the servants of the university community" (Isaac, 1983 : 219). The professional librarian, according to Veaner, is ideally the constant partner of academic staff and also the student (1985 : 219).

#### 2.5.2 Non-Professional Staff

Non-professional library personnel encompasses a variety of sub-categories : para-professional staff (cf glossary in Appendix I) for the definition used in this investigation; clerical staff; technical staff. Non-professional staff relieve professional staff of some of the routine, unprofessional task. Vuturo noted that professional staff members have for far too long busied themselves with "housekeeping duties that would most appropriately be left to the support staff" (1977 : 739).

Vuturo suggests that library support staff must be required to assume increased clerical and paraprofessional duties in order to release librarians for teaching functions (1977 : 740). The impact of computers on libraries will release professional staff for other tasks, so Hendrik believes that "the tedious work of yesterday and today will be done by machines and nonprofessional staff" (1986 : 127).



### 2.5.3 Staff size

It is very difficult to calculate the adequacy of staff provision. The nature and size of the staff complement is determined by a number of factors, such as number of students and academic staff, the size and design of the university library; the book collection, the number of hours of opening and so forth (cf Gelfand, 1971 : 52).

The ALA Standards for university libraries indicates in the commentary on standards C.1 :

The size of a university library's staff is determined by many factors, including the number of physically separate library units, the number of service points requiring staff, the number of service hours provided, the number and special characteristics of items processed annually, the nature and quality of the processing to which they are subjected, the size of the collections, and the rate of circulation of the collections. Interinstitutional cooperative arrangements may also affect staff size (cf 3.3.1).

In the "Quantitative analytical techniques for university libraries" which is an appendix to the 1979 ALA Standards (1979 : 107-10), it is suggested that a reduction of data can be achieved by the use of ratios or percentages, and states :

... among ARL libraries in 1976-77, the ratio of professional to nonprofessional staff ranged from 1.08 to 0.24; the average was 0.51 and the median 0.49. The overwhelming majority of libraries tended toward a pattern of one professional to two nonprofessionals (1979 : 107).

In 1973, the Council on Library Resources sponsored a study by

Baumol and Marcus, which produced a publication entitled Economics of academic libraries. This study produced a method for forecasting academic library staffing and budget needs using time series analyses and multiple regression analyses, Baumol and Marcus reported regression equations for the size of the professional staffs and for the size of the total staffs of university libraries. No matter what the actual size of the library staffing establishment it is the way that libraries manage and utilize their staff that is important. The move to accomplish more work with less staff, especially when libraries have stable and declining budgets, requires excellent professional thinking and planning if staff potential is to be realized (Webster, 1977 : 28).

Gelfand maintains that it is irrelevant in developing countries to emphasize desirable proportions of one type of staff to another, since these countries experience extreme shortages of professionally trained librarians while having an unlimited supply of clerical and other non-professional staff (1971 : 53). Kesting in 1977 found that most university libraries in South Africa are "reasonably well staffed", and the mean percentage of qualified personnel in all South African university libraries is 34,7. Three years later he also concluded that it was "difficult to determine whether the student-staff ratio at any university is adequate or not" (1980 : 186).

#### 2.5.4 The role of the librarian

The role of the librarian is critical to the implementation of

any programme to integrate the library into the educational process (cf 4.5.7.8). It is necessary for the librarian to relate effectively to the administration on the one hand, and to academic staff on the other. Unfortunately many librarians have not been effective in 'selling' the role of the library and librarian to either group. Michalak believes the librarian should actively seek out the user not only in the library but also in departmental offices and lecture halls, and not wait for the user to come into the library (1976 : 258). In other words, the librarian must become more aggressive, and take an active not a passive part in the educational process.

Library staff are always eager to help others discover and exploit the wealth of their collections. Wilkinson sees the librarian's function "as a guide and instructor for students" (1970 : 4). Academic staff and students are gradually accepting the fact that "librarians are not just people who issue books, but there is a considerable and capable body of knowledge concentrated in a library building and this volume of knowledge consists of people of high calibre, competent of supporting education" (Schofield, 1977 : 11).

The need for cooperation between library and academic staff (cf 4.6) has been expanded on by Fjallbrant (1977 : 203), Knapp (1966 : 34), Lubans (1971 : 364) and MacKenzie (1969 : 271). They believe that in order for the librarian to understand and contribute to the educational objectives of the institution, the librarian must have frequent contact with academic colleagues. The absence of close links between library and teaching staff can

result in failures in the library, regardless of the efficiency of library staff and the standard of library provision.

Library staff have to encourage academic staff to make the library "the center of study and of educational resources" (Moss, 1966 : 373). It is by developing goals and objectives with academic staff that library staff can carry out their role in implementing a library programme. The regular contact with academic staff must likewise take place between library staff and students.

Librarians must communicate with students in order to "more clearly discern student information needs, what library services they want, and how we can best serve them" (Haro, 1969 : 2208). The librarian can prove invaluable in assisting students "to differentiate between sources of information, to form critical judgements, and take the student to the point where he, himself, can solve his problem" (Revill, 1981 : 115). The failure to relate to students can be attributed to librarians who, according to Haro, treat them "more as childlike patients than concerned individuals" (1977 : 2207). Or, library staff may be so pre-occupied with meeting the demands of academic staff or graduate research students, that undergraduate students are ignored or given cursory attention (Moss, 1966 : 94).

In 1975 Dillon reported on a successful experiment at Sangamon State University where "librarians are viewed as teachers and are freed from administrative duties" (1975 : 4). Library staff joined with academic staff to make the library's resources a

vital part of the educational process. The librarian's involvement in this 'teaching' can range "from the classroom, via instruction in the library's own teaching rooms to the individual 'tutorial' at the library inquiry desk" (Revill, 1981 : 114-5).

Innovative programmes to reach out to students, particularly undergraduate students, enable librarians to make their libraries more receptive and responsive to student needs (cf 4.5.6.2).

As the library field grows ever more sophisticated, librarians as collectors, organizers and purveyors of information are increasingly going to have to deal with automated systems, use database systems and new technologies. Academic librarians have an important role to play in using such technologies and making them, as 'computer-wise libraries', an integral part of library operations (Carlson, 1986 : 97-8). The librarian, Hoadley contends, will maintain the traditional role of service to users, but "in a highly automated environment" (1985 : 470). As Line warned librarians as early as 1968 :

... be prepared for radical changes in the structure of knowledge, in [the] means of storing and transmitting information, and in the actual needs of users (1968 : 156).

The role of the librarian will become central to providing access to information and shaping the way the library responds to the academic community. The librarian will be required to inter-face more with the information because users will experience 'entry difficulties'. Users will have to master the physical means of getting at the information while at the same time their

utilization will be much more efficient. Hendrik suggests that the solution to entry difficulties will require teaching by the librarian, and in order for students to succeed at university they will be required to complete courses in library instruction (cf 4.5.7.6.4) and that this "development implies ... one major role change for the professional librarian [which] will be uniform movement to faculty status" (1986 : 128).

#### 2.5.5 Summary

Traditionally, the academic librarian has had the image of keeper or custodian and had 'low visibility' on campus "attributable in part to traditions of passive, reactive behavior" (Veane, 1985 : 215). This is an image which leaders in university librarianship have been trying to change in recent years. The changes wrought about by computerization are requiring librarians to redefine their role, delegating more routine tasks to non-professional staff and acquiring new knowledge and skills. The role of the librarian must be "to establish and maintain a proactive rather than a reactive position within the academic community" (Creth, 1985 : 471).

### 2.6 FUNDING THE UNIVERSITY LIBRARY

Library provision at universities centres around three key resources : staff, resource collection and facilities. Fundamental to the provision of all three resources is adequate funding. The responsibility for this funding lies with the parent

institution - the university itself. The ability of the institution to provide the kind of financial support required by the library, is determined largely by the overall financial provision made available to it from government. This provision, it may be mentioned in passing, at present constitutes more than 75% of the revenue of all universities in South Africa.

A library should argue in its annual request for additional funds, that it is seeking extra funding to increase the quality of education it offers to its clientele (Moran, 1978 : 86). Depending on how wealthy the university is, the more the available money to spend on its academic activity, the better the quality of education and research that can be offered as a result inter alia, of the money available to the library which is one of the most important infra-structural components of the academic programme.

Book and periodical prices have risen dramatically throughout the world since the early 1970's, and especially so in South Africa because of the drop in the exchange rate against the major world currencies, while increases in library budgets have failed to keep pace, or in some cases, have been non-existent. Budd and DiCarlo observe that :

"The amount of information produced and made available continues to grow regardless of the economy, so libraries have realised the importance of the well-spent dollar" (1982 : 71).

Meanwhile there has been a distinct need on the part of the library to realise that it is facing increasing competition for

the available funding on the campus (Taylor, 1978 : 45), and that there is also a need "to convince users, and especially academics, that adequate finance to ensure quality within the library is essential to teaching and research" (Greenwood, 1977 : 572).

The U.C.T. Library Committee's working document on a library endowment fund (undated, but under consideration for 1987) attempts to highlight for academic staff the economic problems it is facing. It refers to the decline in the value of the rand relative to other currencies, the increase by 213% in the local cost of books over a period of 5 years, and the increase of periodicals by 600% over the same period (the number of titles purchased in both categories has declined markedly year by year). This has resulted in the purchase of less than 30% of the periodicals considered internationally to have 'core quality'. Only 6% of books (i.e. 1 in 15 books) of definite scholarly value can be purchased. Each department at the university drew up comprehensive policy statements on library needs during 1983 and the estimated real financial requirements amounted to over R7,5 million, about five times the sum currently available. The University's basic commitment is to the education of undergraduates, but is taking in more postgraduate research students, and the university library, already inadequate to support undergraduate studies does not have the financial resources to provide for the variety of more advanced studies which are being encouraged and pursued. The U.C.T. Library is by a considerable margin the most intensively used South African library by undergraduates (60 issues per student per year on



average) and by specialist researchers (who have become pre-eminent in South Africa) drawing on funds from the CSIR, Medical Research Council and Human Sciences Research Council. The growing demands require that the financing of the U.C.T. Library needs to be put on a solid long-term foundation (hence the establishment of a Library Endowment Fund) so that sensible planning is not frustrated at every turn (U.C.T. Library, undated : 1-3).

Libraries in the United States have also been hard hit by the decline in the dollar overseas and substantial increases in the cost of periodicals. The prices of American periodicals rose close to 10% in 1987 and overall prices have risen by 14 to 18%. University libraries are substantially overspending their budgets in 1987. Harvard University Library, which is the largest academic library in the United States with 106 000 periodicals, exceeded its budget by \$480 000. Librarians report that 1988 subscription lists will have to be cut by 5 to 15%. At the University of California, Berkeley (with 92 000 journals), which overspent by \$3000 000 on its \$12,5-million budget, cuts of 8 to 12% will be made. Book budgets are being used to make up shortfalls. European journal publishers are becoming increasingly dominant in the international market - for example, Elsevier (Netherlands), Springer (West Germany) and Pergamon (England) account for 25% of the periodicals budget at Louisiana State University, where foreign journals account for 40% of the titles and 60% of the costs. Libraries are complaining that subscription prices for American journals are rising faster than the rate of inflation measured by the Consumer Price Index. For example, the American Chemical Society's publications have increased by 36% in

the last year (Chemical Abstracts rose from \$6 400 to \$ 8 400 in 3 years), and physics journals by 32% from 1985 to 1986. Core journals (mostly American) in 15 disciplines showed a 2-year price increase averaging 31,9%. American university libraries believe they are being exploited by journal publishers who feel "libraries will pay anything" (Holden, 1987 : 908-9). The situation in which American libraries find themselves translates well to the predicament most South African university libraries are facing.

Possibly a university library, when referring to the ubiquitous problem of limited and shrinking funding, can point out that a "poorly endowed library will be a drag on the educational aims and development of a university" (Higham, 1967 : 205). If sufficient funds are not forthcoming to redress the drastic imbalances in its purchasing power, a library has cause for concern that its educational potential in the academic activity of universities may decline equally rapidly. This concern is endorsed by Josey who examines the role of the black academic library in the United States. Josey reveals that where there is a history of inadequate budgets, not only libraries are hampered by poor resources and limited staffing, but the meagre funds they receive over the years permit librarians to assemble only small collections which are quite inadequate to support the educational programme satisfactorily (1969 : 3019-69).

#### 2.6.1 Funding Adequacy

It has been pointed out above that throughout the world

university libraries have been experiencing a reduced purchasing power owing to the factor of inflation. Libraries must therefore ensure that even if their funding does not increase in real terms, the amount allocated to them remains relatively stable in terms of the broad purchasing power, while allowing for an inevitable decline owing to a volatile inflationary trend (cf 2.67 situation in American university libraries in 1987). One method libraries have used to counteract this problem to the best of their ability, is to make certain that they obtain at least a constant percentage of the total university budget. A figure of 6 percent is often mentioned in this regard (Parry Report, 1967), while Eave pointed out that the percentages among South African universities varied from a low of 5,57% to a high of 9,00% between the years 1971 - 1974 (cf 2.6.3.4 for a more elaborate discussion of the South African position). Although Greenwood believes that there is "little evidence to support any specific figure" (1977 : 573) as new libraries would require substantially more than this amount and older libraries arguably less. The Parry Report recommends :

... that in real terms the cost of maintaining relative standards in university libraries may rise faster than other university costs. Thus an allocation of a fixed share of university revenue to libraries would entail a relative decline in library standards (U.G.C., 1967 : 156).

A suggestion by the UGC in Great Britain in 1967 to specifically earmark funds for libraries was reflected as an unwarranted intrusion upon the university's ability to allocate financially (1968 : B14).

A more indirect way of ensuring an adequate level of funding, is the setting of basic or minimum standards for institutions of different sizes and types. The Clapp-Jordan formula is an example of this. It attempted to establish an absolute basis for measuring the adequacy of collections by calculating the minimum quantity of library material needed to serve particular kinds of library use. To these minima were added weightings relating to the intensity of that use, measured by the number of potential users in particular fields. Clapp and Jordan concluded that by placing weights on various controlled conditions "it is possible to provide a meaningful measure of adequacy in library collections" (1965 : 371-80). The Clapp-Jordan formula provided librarians with a practical approach to budgeting - a "pseudoscientific formula" (Moran, 1978 : 88), which has since gained much acceptance among university libraries, particularly those in the United States.

Another study concerned with the adequacy of library resource allocation was executed by Raffel and Shisko at the Massachusetts Institute of Technology. It was a library cost-benefit analysis, but their suggestions proved difficult to implement (1969). The reason for this was that "the process of resource allocation in libraries is constrained by the reality that the planner does not have much flexibility in making budgeting decisions" (Webster, 1977 : 23).

The adequacy of the budget allocated to the library is commented on in the commentary of standard F.1 of the ALA Standards for university libraries which states :

... it is essential that a university library be provided with sufficient funding to enable it to develop appropriate collections, provide appropriate services, carry out necessary operations, and satisfy identified expectations and requirements (cf 3.3.1).

The commentary also mentions that many other attempts have been made to develop formulas or 'objective' measures to determine the budget :

These measures range from matching funding with student enrollment to defining a minimum percentage of the total university ... budget which should be devoted to the library. Such 'objective' approaches to budget determination do not always take cognizance of the range and complexity of demands which any university library must meet, as well as the significantly different library needs of different universities (cf 3.3.1).

In her master's thesis, Eave has detailed the principles and practices of allocation (1979 : 73-99), and in so far as the specifics of allocation are concerned it is beyond the scope of this investigation to discuss her findings. None the less, it has been found unavoidable in the immediately following sections to refer to formula approaches to aspects of library funding. Suffice to note that traditional methods of determining library finance will encounter much closer scrutiny and require considerable justification against competing claims in future. Requests by libraries for increased financial provision must be justified by statistics, and decisions made about such requests based on measurement processes.

### 2.6.2 Funding Formulas

The use of formulas to allocate or to evaluate resources for university libraries has received a good deal of attention in recent years. Formulas are objective bases for determining the level of acquisition, staff or funding. Metz and Scott describe formulas as follows :

On the one hand, formulas are seen as objective and apolitical, and as a means of ensuring continuity and rational planning. On the other hand, formulas are criticized for their procrustean tendency to ignore significant local differences and for the danger that they may actually be used more as ceilings, which set maximum resource levels, than as floors, with unfortunate results, especially when enrollments decline (1981 : 127).

Most formulas used by governments to calculate library funding requirements are "enrollment driven" (Cooper, 1986 : 354). This is largely as a result of formulas developed during the 1960s and early 1970s in the United States, where it was assumed that operating costs varied according to enrollment. Indeed, this 'undue emphasis' on student enrollment when financing academic libraries is "cause for concern in a time of static or declining enrollments" (Lor, 1981 : 82).

While formulas to determine collection levels have generally received the most attention, there have also been a number of attempts to devise an objective means of determining staffing levels. The ALA Standards for university libraries outlined qualitative criteria (cf 3.3.1) for what staffing a library should have. It also declared :

As such factors vary widely from one institution to another, no single model or formula can be provided for developing an optimum staff size (1979 : 104).

While the ALA may have been reluctant to devise a formula, other institutions and governments have done so. Such formulas as exist have mostly been developed for higher education systems, an area where such formulas are most needed. Staffing formulas have been devised at New York City and in the states of New York, Colorado, Washington, Oregon, Florida and California (Axford, 1971 : 87-104; Fairholm, 1970 : 332-40). Enrollments were used as the key input into all these formulas but they all differed in a number of ways, some using different constants or weight factors while others established sliding scales to determine the relationship between input parameters and staff levels (Metz & Scott, 1981 : 126-7).

In a survey of library formulas in the United States in 1985-86, Cooper found that the enrollment/funding relationship is still fundamental to library formulas in practice. Either a cost rate per student is used to calculate library funding, or a percentage of funding calculated for instruction. As instructional formulas are driven by enrollment, library funding "is vulnerable to enrollment declines in both methods" (Cooper, 1986 : 355).

The 'Texas formula' developed in 1963 at the University of Texas allied student enrollment to library staffing, according to McAnally. If there was an escalating enrollment the ratio of professional librarians decreased while the ratio of clerical positions within the library increased in direct proportion to

student numbers. The ratio Texas used was 1 : 300 for the first 1 500 FTE students; 1 : 400 for the next 1 500 and 1 : 500 for all FTE students in excess of 3 000. The clerical scale was 1 : 300 for the first 1 500 FTE students; 1 : 250 for the next 1 500 students and 1 : 200 for all over 3 000. The formula used a sliding scale according to the size of the student body. Similarly, the State universities of New Jersey, Florida and New York which used this formula also used the sliding scale although Florida added an extra 1/2 unit for students enrolled or served by branch libraries as a recognition of added service costs (McAnally, 1963 : 159-71).

In 1973 Booz, Allen and Hamilton, Inc., conducted an investigation into the organization and staffing of the Columbia University libraries. Their study revealed that 67% of the total library budget of this library system was committed to salaries and wages, with 28% spent on books, serials and binding and 5% on supplies and other sundries (Booz, 1973 : 34).

An early survey of American university libraries in the 1950s by Harrer, revealed that the average amount spent on library staff salaries was 63,4%, while 31,9% was spent on books, serials and binding, and 4.7% on miscellaneous items. The 98 American university libraries surveyed were ranked according to collection size and it was found that libraries with collections of 600-900 thousand spent less on salaries (61,87%) than the largest libraries which had collections of 1 400 - 3 000 thousand volumes (and spent 67,59% on salaries) (Harrer, 1957 : 210-12).



In Bryan's 1976 investigation into various aspects of library provision in British universities, he commented on the lack of up-to-date statistical information. He uses the 1971-72 details of financial provision which showed an average of 51,1% being spent on salaries. This showed no change from the 1955/56 national average which was exactly 50%. By way of contrast Bryan notes that during the same period Australian university libraries' expenditure on salaries went up from 52,2% to 55,1%. The range in each country was enormous with the highest British amount of 70,2% spent on salaries at London, and the lowest amount of 32,8% at Brunel. In Australia the range was 64,1% (Australian National University) and 44,7% (Murdoch) in 1974 (Bryan, 1976 : 32-8).

In South Africa, the Subcommittee on Subsidization of university libraries of the Committee of University Principals, reported in September 1967 on the relationship between the different categories of expenditures for eight universities between the years 1962 to 1966 as follows :

## Biblioteekuitgawes: Persentasie aan boeke, ens. bestee.

	1962	1963	1964	1965	1966
Pretoria	51.24	52.33	61.04	62.16	64.92
Witwatersrand	38.08	31.18	40.21	39.30	30.87
Kaapstad	25.43	20.09	22.07	27.70	26.34
Stellenbosch	39.51	42.43	38.39	42.82	41.06
Gemiddeld	38.22	36.27	41.44	43.91	42.37
Natal	35.62	32.36	41.45	38.90	35.95
Potchefstroom	36.59	34.85	40.22	41.29	39.15
Oranje-Vrystaat	32.48	38.15	42.43	47.15	39.63
Rhodes	49.65	54.20	52.72	50.32	42.79
Gemiddeld	37.61	38.03	43.20	42.87	38.72
Gem. 8 univers.	38.10	36.89	42.04	43.56	41.14

## Biblioteekuitgawe: Persentasie aan salarisse bestee.

	1962	1963	1964	1965	1966
Pretoria	47.16	44.87	37.90	36.42	33.74
Witwatersrand	57.97	64.71	56.37	55.61	63.86
Kaapstad	67.69	69.74	65.01	61.59	61.79
Stellenbosch	57.90	54.84	59.14	54.29	56.61
Gemiddeld	57.89	58.56	53.59	51.08	52.45
Natal	58.09	65.03	55.01	54.20	57.23
Potchefstroom	57.18	58.81	58.04	50.88	55.28
Oranje-Vrystaat	64.46	59.14	55.17	50.65	58.23
Rhodes	47.16	42.33	39.26	42.06	44.35
Gemiddeld	57.29	58.12	53.26	50.70	54.79
Gem. 8 univers.	57.69	58.40	53.47	50.95	53.24

Biblioteekuitgawe: persentasie bestee aan diverse uitgawes.

	1962	1963	1964	1965	1966
Pretoria	1.60	2.80	1.06	1.42	1.34
Witwatersrand	3.95	4.11	3.42	5.09	5.27
Kaapstad	6.88	10.17	12.92	10.71	11.87
Stellenbosch	2.59	2.73	2.47	2.89	2.33
Gemiddeld	3.89	5.17	4.97	5.01	5.18
Natal	6.29	2.61	3.54	6.90	6.82
Potchefstroom	6.23	6.34	1.74	7.83	5.57
Oranje-Vrystaat	3.06	2.71	2.40	2.20	2.14
Rhodes	3.19	3.47	8.02	7.62	12.81
Gemiddeld	5.10	3.85	3.54	6.43	6.49
Gem. 8 univers.	4.30	4.71	4.49	5.49	5.62

(Komitee van Universiteitshoofde, 1967 : 15-16)

The Subcommittee, commenting on the above tables states :

Uit die gegewens blyk dit dat die verhoudinge tussen die verskillende kategorieë uitgawes by die meeste universiteite nie ten volle ooreenstem met die erkende norme (1967 : 16).

The 'norme' to which the Subcommittee refers, were those suggested by Harrer (referred to above), of 31,9% on books, 63,4% on salaries and 4,7% on other expenditures (1957 : 210-12). The Subcommittee also concludes :

Die groot variasie tussen diverse uitgawes moet toegeskryf word aan die feit dat daar so min ooreenstemming by universiteite is ten opsigte van uitgawes wat hieronder ingesluit word (1967 : 16).

The Virginia Library Advisory Committee Ad Hoc Subcommittee on Staffing devised a new staffing formula in 1981. The input factors identified as parameters for the staffing formula were FTE undergraduates, FTE graduates, FTE academic staff, volumes held, volumes added (gross) and the number of distinct library sites. The reasoning for including the latter three factors is because :

... the human resources required to maintain large collections and the buildings that house them, to shelf-read, periodically to move and to provide reference access to large numbers of books are not to be discounted (Metz & Scott, 1981 : 130).

The formula derived at by the subcommittee is given as :

$$\text{Library Staff} = \text{Undergraduate FTE}/1000 + \text{Graduate FTE}/100 + \text{Faculty FTE}/33 + \text{Volumes Added}/5000 + \text{Holdings}/22000 + (2) \text{ Sites.}$$

For each parameter a small denominator will yield more positions for those institutions for which the ratio of the parameter to staffing is high, while making a smaller contribution to staffing levels for those institutions whose same ratio is low (Metz & Scott, 1981 : 131). The formula is an attempt to reflect more accurately the various factors that shape a library's staffing needs.

An example of the cost rate per student method is the library formula developed in 1973 by the Alabama Commission on Higher Education. Student semester credit hours are multiplied by the cost factors : viz. undergraduate \$5.46, master's students

\$10.97, doctoral students \$46.97 and law students \$28.98 (1985-86 costs), while the South Carolina Commission on Higher Education's formula currently calculates library funding as 10 per cent of instructional costs (Cooper, 1986 : 355). Inherent in formulas such as that of the Alabama Commission, is the assumption that the cost of providing library services to each additional student is the same for an institution with as few as 3 000 and another with as many as 33 000 students. Another underlying assumption is that library costs increase or decrease proportionately to increases or decreases in enrollment. Likewise, another argument is that it costs the same to serve one student as it does to serve all students.

When student enrollment declines it is natural that there will be some reduction in overall institutional funding. However, Cooper warns that unintentional and severe consequences occur to libraries when a formula subtracts the average cost per student. This is because a substantial portion of library costs is fixed or is not influenced by enrollment changes. Studies of budget reallocations or reductions by Hyatt, Shulman and Santiago in 1984 found that academic support areas like libraries are often first targets for budget reductions, but that short-term solutions to funding reductions often become long-term problems (Cooper, 1986 : 356). Cooper believes that reductions in library collections, hours of opening, and range of services has an adverse 'ripple effect' on instruction, research and the institution's ability to attract and retain academic staff and students. Cooper concludes that the answer lies in redesigning library formulas to more accurately reflect cost behaviour. He

maintains that the underlying premise that funding should depend on enrollment growth, should change to linking funding with 'programmatic decisions' :

If significant enrollment decline is forecast or is occurring, decisions to cut back library funding should result from a review of the scope of academic programs and desired library services (Cooper, 1986 : 357).

As an example, Cooper cites the cancelling of a health care periodical subscription based on a decision to phase out a postgraduate programme in public health rather than from an enforced cancellation caused by an enrollment driven formula. The important task Cooper maintains, is to redesign formulas to encourage effective library management and planning by rewarding performance. University librarians therefore have an important 'stake' in understanding and influencing funding formulas (Cooper, 1986 : 358). The Tennessee performance-related funding incentive system which allows an institution to earn an additional amount of up to 2 per cent of its budget, is determined by performance in terms of five given variables (Brogne & Brown, 1982). Such a move towards quality determining funding is a move towards funding for excellence. While such formulas may retard improvements to some libraries, they should in the long term 'enhance quality' and "very likely result in improved funding for library services" (Cooper, 1986 : 358). In much of the literature on university librarianship the hope for an improvement in the quality of higher education is subsumed. It goes without saying however, that in order to improve the quality of university libraries adequate resources and funds, and changes

in the structure and use of funding formulas would be required.

### 2.6.3 Funding South African University Libraries

The funding of academic libraries in South Africa has been dealt with at length by Lessing (1970) and to a more limited extent by Eave (1979) (cf also Komitee van Universiteitshoofde). Onderkomitee vir Universiteitsubsidie. Verslag van onderkomitee (benoem om die uitgawes op biblioteke in vergelyking met die werklike behoeftes van die universiteite te ondersoek) aan Komitee van Universiteitshoofde (Potchefstroom 1967). However, neither investigation examined the funding of so-called "ethnic universities" (Lor, 1981 : 75). This would appear to be a gap in literature and an area for further research.

Funding for the universities in South Africa is divided at present among the various departments of education, viz. the Department of National Education, the Department of Education and Training, and the departments of education of the House of Delegates and the House of Representatives. It should be mentioned in passing that in the case of black education control until 1954 (i.e. including the funding of the only black university at the time, viz. Fort Hare) was divided between "the State, the Provincial Administrations, missionary societies and the people themselves" (Horrell, 1968 : 1).

#### 2.6.3.1 University library subsidies before 1953

Before 1949, the state subsidy for white universities had been

based on formulas which related either to the expenditure or to the income of a university, but not to both. This had been in accordance with proposals submitted by various commissions and committees. These included :

The Thomson Commission in 1910 (Thomson, 1910);

The Laurence Commission in 1914 (Laurence, 1914);

The Van der Horst Commission in 1928 (Van der Horst, 1928;

The Adamson Committee in 1933 (Adamson, 1933);

The Du Toit Committee in 1944 (Du Toit, 1944);

(Eave, 1979 : 100).

Between 1949 and 1953 allocations by the State to White universities were made without any regard to increasing student numbers or to escalating costs. These universities experienced 'rather uneasy' financial relationships with central government "especially as a result of regulations which required the responsible Minister to approve of a host of matters which were of a rather detailed administrative nature" (Louw, 1981 : 63). In respect of university libraries, Lessing reports that prior to 1953 :

... geen afsonderlike voorsiening deur die Staat aan die universiteite vir die universiteits biblioteek gemaak is nie. Dit het elke universiteitsraad vrygestaan om enige willekeurige bedrag uit die karige en reeds onvoldoende universiteitsinkomste aan die biblioteek beskikbaar te stel (1970 : 88-9)

Information about income and expenditure at white university libraries prior to 1951 is too sketchy for our purposes here, but



it has been established that between 1951 and 1952 the library subsidy at the four largest residential universities (i.e. Cape Town, Stellenbosch, Witwatersrand and Pretoria) had varied between R11-01 to 19-24 per student with an average of R13-97. The library subsidy at these universities included a separately specified amount for books, periodicals and binding which ranged from R4-46 to R5-44, with an average of R4-72. At the four smaller white residential universities (i.e. Natal, Orange Free State, Potchefstroom and Rhodes) the library subsidy per student varied between R10-29 and R24-02, with an average of R16-62. The amount specifically set aside for books, etc. ranged from a low of R5-87 to a high of R10-98 with an average of R7-86. The situation was such that collection development at these libraries was "so ontoereikend dat dit nie moontlik was om doeltreffende biblioteke uit te bou nie" (Lessing, 1970 : 91).

Financial assistance for black education up until 1945 was also far from adequate (Horrell, 1968 : 1). For 23 years (1922-1945) the amount voted by the State had been restricted to R680 000 per year plus a proportion of the taxes paid by blacks in direct taxation (the amount of R680 000 refers to total expenditure by the State on black education including the South African Native College - later called Fort Hare). A change came about in 1945 as a result of the Native Education Finance Act of 1945, when it was decided that funds for black education would all come from the Consolidated Revenue Fund. Educational expansion was no longer dependent on the amounts paid in direct taxation by blacks and consequently expenditure rose. The system of financing changed again in 1954 when Bantu education was formally introduced (at

the time Fort Hare was still the only university college for blacks). This was as a direct result of the recommendations of the Eiselen Commission (Report of the Commission on Native Education, 1949-51, UG 53/1951). All institutions providing training for blacks were subsidized under the control of the Department of Bantu Education and not under the Department of Education, Arts and Science as hitherto.

Black university education during this time was limited. The South African Native College founded on 8 February 1916 had become a constituent college of the University of South Africa under the Education Act of 1923 and was named the University College of Fort Hare. It was the only university college for black students until 1960. The main financing, apart from government subsidies, was that of the three co-operating churches, viz. the Church of the Province of South Africa, the Wesleyan Methodist Church of South Africa and the United Free Church of Scotland. It appears from intensive searching that no information is available of what percentage of the university budget was spent on the university library at the time. It seems evident therefore, that there was no specific provision for university libraries in the State subsidy at either the black or white universities.

#### 2.6.3.2 University library subsidies before 1960

The situation in white education changed dramatically with the introduction of the Holloway subsidy formula in 1953. Under the chairmanship of JE Holloway, a Commission of Inquiry into

University Finance and Salaries had been appointed in 1951. The commission presented its findings and recommended :

... inter alia, the categorisation of the needs of the universities for the purpose of calculating subsidies. These categories comprised:

- a. Basic teaching needs, irrespective of student numbers;
- b. Teaching needs in relation to student enrollment;
- c. Cost of living allowance (Eave, 1979 : 101).

The concept of student numbers was fundamental to the subsidy formula (Holloway, 1951 : 42) and the Commission recommended the annual expenditure on a university library should bear a specified relationship to the numbers of students (Holloway, 1951 : 44). The one-man Cilliers Committee reported in 1967 that the net result of the Holloway Commission was that state aid for total university expenditure was raised from 47,82% in 1951 to 67,24% in 1953 (Cilliers, 1967 : 3). Despite this increase in expenditure, the expectations of the university libraries were "in 'n groot mate teleurgestel" (Lessing, 1970 : 96). The four larger libraries which in 1951/52 received an average of R13-94 per student, were only allocated in 1953 an average of R14-32 per student - a difference of only R0-35. The four smaller university libraries were even worse off. In 1951/52 they had received an average of R16-62 per student, while under the Holloway formula they received only R15-38. This was effectively R1-24 less. The implications for university libraries were dire, and Lessing contends :

Hierdie aanvanklike onvoldoende voorsiening onder die formule het in die jare na 1953 'n nadelige invloed op die finansiële voorsiening aan universiteitsbiblioteke gehad. Al het verskeie universiteite die bedrag aan subsidie ontvang, sover as hulle vermoë dit toegelaat het, uit eie fondse aangevul, het die subsidietoekenning sonder twyfel die uitgawe van biblioteke ernstig aan bande gelê (1970 : 99).

The Holloway subsidy formula was more than just a mechanism for university financing. It was also the embodiment of a philosophy of relationships between the universities and the State and afforded :

... universiteitsrade die geleentheid om hul regmatige rol te vervul as liggame wat by magte is om aan hul universiteite 'n eie inhoud en karakter te gee (Louw, 1981 : 66).

A subsequent Holloway commission was appointed in 1953, but its terms of reference were "to 'investigate and report on the practicability and financial implications of providing separate training facilities for non-Europeans at universities'. The desirability of such separate facilities was not included in the terms of reference" (Horrell, 1968 : 15). This Holloway Commission published its report in 1955 in duplicated form. The Commission rejected on financial grounds the establishment of new universities for 'non-whites'. During the term of office of this Commission, a budget formula was evolved for black education in its entirety in 1954 which was based on the system of provincial financing then in existence. A fixed sum of R13 million was made available for black education (including the funding of the University College of Fort Hare) in the financial year of

1954/55. This was supplemented by the total direct tax paid by blacks. In the 1955/56 financial year the joint total amount available was R15 million. The subsequent enormous increase in school attendance by black pupils meant that the budget was stretched to its limits. The increases in black taxation could not keep pace with the demands for education and by 1960/61 the budget had to be augmented from the loan account to make up a total of R20 million.

Despite the recommendations of the 1955 Holloway Commission report, an interdepartmental committee to collect information on the financial implications of providing separate facilities was appointed. This led to a draft Separate University Education Bill, and finally the Extension of University Act, No.45 of 1959. Despite considerable opposition from within and outside Parliament to this Act, it provided for the establishment of university colleges :

... for non-white persons, to be financed out of moneys appropriate by Parliament from the Bantu Education Account in the case of African colleges, but from the General Revenue Account in respect of Coloured and Indian colleges. It was decided that these institutions should fall under the control, respectively of the Ministers of Bantu Education, Coloured Affairs, and Indian Affairs (Horrell, 1968 : 17).

For the financing of expenditure of the university colleges of the North, at Turfloop, and of Zululand, R3 250 000 was transferred to the Bantu Education Account during 1963/64 to defray expenditure from 1960. A further R1 500 000 was annually credited to the account. At no stage was any indication given as

to what amount was to be passed on to the university library in the way of a subsidy.

#### 2.6.3.3 University library subsidies before 1973

In 1961 a Committee of enquiry into the quinquennial revision of university subsidy formula was appointed to investigate the funding of white universities and UNISA. The Committee's proposals were adopted in 1963 (Eave, 1979 : 102). The percentage of the State subsidy was effectively increased from 66,5% to 71,0% as a result (Cilliers, 1961 : 81). During the period 1964 to 1968 the average library subsidy was R29.29 per year per student while the average expenditure was R33.97. The difference between these two amounts was an average of R4.68 per year per student, which the universities were expected to make up out of their own funds. The net effect, Lessing concludes, was :

... dat die bedrae aan universiteite onder die formule vir biblioteek doeleindes in hierdie termyn ... heeltemal ontoereikend was vir die lopende uitgawes aan studiemateriaal en personeelsalarisse (1970 : 116).

At the same time as the Cilliers Committee was presenting its findings a change in the whole financing pattern of black education took place in 1963. This was as a result of "the creation of National States with their own departments and their own budgets ... when Transkei became a National State (South Africa (Republic) Department of Education & Training, 1981 : 2).

Dealing with expenditure on university education, Basson comments

on the doubling of the student intake at white universities (excluding UNISA) from 22 100 in 1956 to 44 200 in 1967, and notes that :

Die klasgeld per student het in 1956 R144 beloop, wat gestyg het tot R161 in 1967. Gemiddeld het die klasgelde oor die 12-jaartydperk onder bespreking, 29 persent van die bruto koste bedra. In 1967 is meer as R7 miljoen aan klasgelde deur die universiteite ontvang (1972 : 47).

The opening of the university colleges of the North, at Turfloop and Zululand in 1960 meant that black students who had previously attended the universities of Cape Town, Natal, the Witwatersrand, Rhodes and the University of South Africa were no longer allowed to attend these universities (except the University of South Africa) unless they were registering for courses not offered at the university colleges. Basson reports that the costs at the university colleges :

... per student toon 'n daling van R1 990 in 1961 tot R1 580 in 1968. Die daling kan toegeskryf word aan die feit dat die eenheidskoste hoër is gedurende die beginstadium van so 'n inrigting weens die hoë uitgawes en relatief lae studentetal (1972 : 62).

A similar drop in the cost per coloured student at the University of the Western Cape occurred. In 1964 the cost per student was R1 452 while in 1968 it had decreased to R1 076. Basson attributes the same reasons for this drop in costs as that for the "Bantoe-universiteite" (1972 : 62). At the University of Durban-Westville the costs per Indian student were R928 in 1963 and R972 in 1968;

here too "geld dieselfde redes as in die geval van die Bantoes en Kleurlinge" (Basson, 1972 : 63).

Expenditure on education by 1969-70 was as follows :

	R - million
The provinces (White education)	241,6
Department of National Education (mainly Whites)	53,9
Other government departments (mainly Whites)	18,6
Department of Coloured Affairs	41,9
Department of Indian Affairs	15,8
Department of Bantu Education	49,9
	421,7

The State subsidy for black students in South Africa in 1969-70 was

Fort Hare	R1 867
Zululand	R1 443
The North	R1 045
Western Cape	R 900
Durban-Westville	R 702-80
(SAIRR Survey 1972 : 344-385).	

In 1970 the university colleges of Fort Hare, the North and Zululand were granted autonomy and full university status (South Africa 1983 Official yearbook, 1984 : 697). In 1972 the Bantu Education Account Abolition Act, No.20 of 1972 was passed. This provided for the black universities to be financed out of moneys appropriated by Parliament. A budget post was allocated to the then Department of Bantu Education, and the first budget according to actual need was submitted for R27 million in the 1972/73 budget year. Per capita costs for university students worked out as follows :

White students	R 843-93
Black students	R1 384-00
Coloured students	R 831-28
Indian students	R 785-46
(SAIRR Survey 1972, 1973 : 383)	



The University of the Western Cape was financed at this stage by three sources - the Revenue vote of the Department of Coloured Relations and Rehoboth Affairs, the Loan Vote of the Public Works Department, and the Revenue and Loan Votes of the Coloured Person's Representative Council. Indian university education was financed at this time by the Departments of Indian Affairs and Public Works.

The subsidy system as it then applied at white universities, was discarded as out-of-date and from 1968 state subsidies to universities were calculated on an ad hoc basis by the University Advisory Committee. The reason for this was due to the fact that the 1960s was a period of unprecedented growth in student numbers and rising inflation, and Louw maintains :

Die formule kon nie soepel genoeg aanpas by stygende behoeftes nie en daar moes van tyd tot tyd op 'n ad hoc-grondslag bedrae tot die subsidies toegevoeg word (1981 : 66).

By 1974 universities were receiving an average subsidy of 64 per cent. White universities with a student enrollment of 8 000 students received 75 per cent whereas those universities with fewer than 2 000 students received 85 per cent (De Vries, 1974 : 361). In order to meet "present day requirements" the Van Wyk De Vries Commission was appointed in 1974 to devise a new formula for subsidizing universities.

#### 2.6.3.4 University library subsidies before 1979

The key to the Van Wyk De Vries formula was student enrollment.

the commission felt that if a student/staff ratio could be determined this would be an objectively ascertainable factor. Student enrollment therefore would determine the number of teaching staff and likewise indicate teaching costs. These teaching costs had already been analyzed and it had been found that academic salaries constituted 55 per cent of the total (De Vries, 1974 : 327). Student enrollment was again used in the funding formula for the university library subsidy.

The Van Wyk De Vries commission calculated the library subsidy on two component parts. These components were related to library staff and to the library materials budget respectively. The library staff salaries were tied to a prescribed percentage (6%) of the cost of the additional teaching and academic auxiliary staff, which were in turn determined by student numbers. Provision was made for the university librarian at professorial rank. The library materials budget was similarly directly related to student numbers (De Vries, 1974 : 337).

In order to demonstrate the effect of the implementation of the formula, the commission calculated the costs of the salaries from the total library budget for the years 1970 to 1974 inclusive (De Vries, 1974 : 369-77). The Commission also calculated the cost of library materials and "estimated that R20 per student in the Humanities, R25 per Natural Science student and R30 per Medical student was sufficient" (Eave, 1979 : 109) and this would enable "at least three volumes per year per student" (De Vries, 1974 : 351) to be bought. These figures of R20, R25 and R30 were considered by the Commission to be variables just as the ratios

between students and staff were "adjustable elements of the formula" (De Vries, 1974, : 345). The subsidy was flexible enough to allow for increases in book and periodical prices and "in 1978 stood at R53 for the Humanities, R75 for the Natural Sciences and R89 for the Medical Sciences" (Eave, 1979 : 109).

The Van Wyk De Vries Commission incorporated the concept of student weighting into the subsidy formula. Eave sums this as follows :

The weighting regarded all undergraduates and non-graduate diploma students as single units for a period not exceeding two years longer than the minimum period required for obtaining the degree or diploma in cases of three- and four- year curricula, and three years where the curricula exceeded four years. Honours students were weighted as two units for a period of one year only. Students doing a master's or doctor's degree were regarded as three units, but in the case of master's students, the subsidy is for one year only, whereas doctoral students are subsidised for two years. Finally, part-time students are calculated at 0,75 (Eave, 1979 : 110).

Another aspect of the formula was "General Operating Expenses" which covered twenty sub-divisions with the library listed as the second sub-division. Library expenses covered wages, stationery, printing, binding, photographic expenses, postage, telegrams, travelling and other items of expenditure. The Commission recommended a percentage for "General Operating Expenses for a university which has in excess of 7 000 students and an amount of 13% of the total university budget" (De Vries, 1974 : 353-5). The recommended percentages of the university budgets listed below exclude the amount available under "General Operating Expenses".

## RECOMMENDED PERCENTAGE OF UNIVERSITY BUDGET

University	1970	1971	1972	1973	1974
Cape Town	7,53	7,31	7,38	7,34	7,43
Free State	6,46	6,40	6,58	6,70	6,87
Natal	6,60	6,03	6,16	6,06	6,09
Port Elizabeth	5,57	5,59	5,62	5,63	5,80
Potchefstroom	6,69	6,61	6,81	6,94	7,13
Pretoria	7,57	7,41	7,42	7,41	7,44
Rand Afrikaans	5,73	5,70	5,85	5,85	5,98
Rhodes	5,99	5,87	5,83	5,68	5,70
Stellenbosch	7,41	7,26	7,33	7,34	7,39
Witwatersrand	7,48	7,37	7,28	7,17	7,22
UNISA	9,00	8,80	8,80	8,67	8,68

It should be noted that these percentages "do not include the separate provisions made by the formula for the four universities which have faculties of agriculture and veterinary science, viz., Pretoria, Stellenbosch, Natal and Free State" (Eave, 1979 : 111). The calculations of the Van Wyk De Vries formula derive from the addition of the salaries and library materials budget divided by the total state subsidy, while the variations between universities are determined not only by fluctuations in student enrollment but also by the changing ratio in the three groupings of Humanities, the Natural and the Medical Sciences.

Eave recommends emphatically that irrespective of the total subsidy, it is essential that the university administration pass on in toto the percentage given by the State to each university for the acquisition of its library materials (1979 : 177).

The underlying philosophy of the Van Wyk De Vries Commission was the responsibility it placed on universities for sound financial administration. Louw attests to this when he states :

Daarna berus die administrasie van 'n universiteit volledig in die hande van 'n onafhanklike universiteitsraad wat vertrou word om die fondse oordeelkundig te bestee en die universiteite op 'n gesonde grondslag te administreer (1981 : 69).

The Van Wyk De Vries formula also implied that universities had to achieve "owerheidsdoelwitte" and this was followed by a similar switch in the financing of black education when, in 1979, the Department of Education and Training (previously the Department of Bantu Education) changed to budgeting by objectives. The universities falling under this department were expected to budget according to seven votes and motivate their requests for additional funding. Requests for funds were governed by certain principles viz., the need to budget for existing functions, budgeting for new functions which the university wished to implement which had to be cleared first with the Treasury so that they could be included in the budget, and the principle that funds budgeted for were effectively spent (Department of Education & Training, 1981 : 3). However, if the amount made available by the Treasury was lower than the original amount requested, the proposed allocations had to be adjusted according to priorities.

In 1978 Coetzee stated that white university expenditure by the State :

... at present contributes 85 per cent towards interest and capital redemption payments on academic projects at universities and 50 per cent on residence. Regular state subsidies cover about 75 per cent of current annual expenditure, student fees about 19 per cent, and support by commerce, industry and the universities' own efforts about six per cent (1978 : 42).

Per capita expenditure by the State until 1983 was distributed between the Departments of National Education and Education and Training, and funds voted to the Department of Internal Affairs (for coloured and indian education). In 1983 saw the introduction of the tricameral parliament and funds were distributed amongst the different departments of education, viz. National Education, Education and Training, and the education departments of the House of Representatives and the House of Delegates. The various departments used different criteria to calculate the per capita figures. Expenditure from the state revenue on education over the period 1979 to 1983 - the period under investigation in the empirical section of this investigation - is shown in the following expenditure table.

<u>Year</u>	<u>Department of National</u> <u>Education</u> R-million		<u>Department of</u> <u>Education &amp; Training</u> R-million	
1979	274 717	(17,66%)	144 213	(9,27%)
1980	324 800	(18,0%)	173 700	(9,6%)
1981	403 400	(19,2%)	261 100	(12,4%)
1982	499 100 000*	(18,5%)	365 300 000	(13,6%)
1983	1463 800 000	(41,9%)	299 100 000	(8,6%)

\*does not include Provinces (white schools) (44,1%)

(SAIRR Annual Survey, 1980-1984).

During the period 1982-83 to 1983-84, per capita expenditure on white education increased from R1 385 to R1 654, while in the same period the per capita expenditure on black education increased from only R192 to R284 (SAIRR Survey, 1984 : 693). However, over the 1982-83 to 1985-86 period the overall expenditure by the state on education shows a greater percentage increase for blacks than for whites, with spending on education divided among the different racial groups in 1985/86 as follows :

29,3% black education

26,9% coloured education

24,9% indian education

14,7% white education

(SAIRR Survey, 1985 : 365-66).

Criticism of the discrepancies in educational spending based on race have come from all quarters and were described by Horace van Rensburg, then M.P., as "absolutely indefensible forms of discrimination" (Hansard, 1985 : vol.3 25 Mar-10 May col.3598-3606).

The basis for these discrepancies lies in the exigencies of the South African political system which has rendered arrangements for education highly complicated and hence open to justifiable criticisms.

#### 2.6.3.5 Introduction of SAPSE Funding

The Van Wyk De Vries formula has been superceded by the introduction of the SAPSE formula. This formula has been derived

from a unique, dynamic information system. It was initially a vehicle for supplying information required by the government about tertiary education, but which in due course became also the basis for calculating subsidies.

By the mid-1970s, universities found themselves in the position of large complex organizations with not only a phenomenal growth in student numbers, but also extensive physical facilities. They had become large-scale enterprises requiring sophisticated management techniques. However, with demographic forecasts predicting a levelling off of white student enrollments and a concomitantly increased demand for limited resources, university management became concerned about a lack of co-ordination, academic programme duplication and institutional accountability (SANSO-STELSEL, 1981 : 31-32). University management became aware of the paucity of reliable and appropriate information to support its decision-making and planning. Venter reports that after consulting both South African and overseas educational sources, an information system suitable for the South African post-secondary Educational scene was designed. A series of manuals, numbered SAPSE-001 to SAPSE-010, were drawn up and completely define and describe "the structure of the information system which is required as an essential aid for planning and decision-making at a national level" (1978 : 3).

The SAPSE management information system is a move towards effective management of post-secondary institutions with the emphasis on efficiency and effectivity (cf 2.3.4). According to Eksteen the SAPSE system is "management-oriented, integrated,



results-oriented, objective-focused, and cost-sensitive" (1981 : 35).

A substantial portion of a university's assets is invested in property, plant and equipment. Therefore it is vitally important that such assets are recorded and accounted for properly when they are acquired, transferred or deleted, and that complete inventory records are kept, reflecting the appropriate classification. The benefits of such a system of fixed assets control and records according to Eksteen are :

- a. 'safeguarding of assets';
- b. 'documentation for insurance purposes in case of fire or other loss';
- c. 'maximum utilisation of fixed assets, especially movable equipment'; and
- d. 'more effective planning, through the availability of historical data' (1981 : 35).

As the university library constitutes the largest single asset of any university, the information supplied for SAPSE purposes is tremendously important. The library is required to annually report its fixed assets - in the SAPSE-010 Information Survey Manual - for the previous calendar year. All purchases, whether taken into permanent stock or not, are reported since the basic principle of the SAPSE system, is that all expenditure on material should be reflected in corresponding additions to the collection.

Likewise, material deleted from stock must be reported. All

library material is reported according to a Classification of Education Subject Matter (CESM) system which consists of twenty two categories. The inventory value of the collection is determined as well as the total replacement value of the library collection. The estimated replacement value is based on the uniform unit price of the different media.

The SAPSE information system was redefined in August 1982 and the parameters of the subsidy formula worked out to provide an economic rationale for government financing of universities. This had come about as a result of suggestions for the improvement of the Van Wyk De Vries subsidy formula made by the Committee of University Principals, and indications by the Minister of National Education to the Universities Advisory Council (UAC) that certain characteristics of the subsidy formula should be investigated. In June 1982 the UAC requested its Executive Officer to undertake an investigation into government financing of universities. The report based on the 1980 and 1981 SAPSE returns, incorporated a number of refinements "resulting mainly from improved comprehension of the relationship between the university and government, as well as the internal functioning of the universities themselves" (Venter, 1982 : 1). The main characteristics of the investigation included :

- a. 'The incorporation of the concepts defined in the SAPSE information system';
- b. 'Adjustments based upon the information generated by that system and submitted by the universities';
- c. 'The simplification of the structure of the formula;
- d. 'The extension of the coverage of the formula to

provide for :

- (i) the replacement of all categories of equipment;
- (ii) the renewal of building space and land improvements other than buildings;
- (iii) the initial costs of additional equipment; and
- (iv) the initial costs of additional library collections'; and

e. 'The extension of the number of internal university factors, upon which the subsidy formula is based, to include :

- (i) both input and output parameters (as opposed to input parameters alone); and
- (ii) the growth of some of these parameters over time' (Venter, 1982 : 1-2).

The decision to subsidize both instruction inputs and outputs was a major breakaway from traditional South African subsidy formula which had previously been based only on student enrollment. The effect on universities to husband their resources "including the oft overlooked, yet major input of student time" is significant. As Venter states :

Subsidies coupled to outputs have the effect of rewarding universities only if their inputs have been put to effective use, in the sense of having produced final academic products. Equally, students should only be supported with public money, if they have put the resources of the university to optimal use (Venter, 1982 : 29).

The major reason Venter gives for not linking the subsidy formula purely to student enrollment is "that thrift becomes a less pertinent virtue than would have been the case had outputs been subsidized instead. Inefficiencies could result : students' incentives to graduate in the shortest possible time could be affected and universities may not feel obliged to select their student material carefully" (1982 : 32). Therefore subsidies for the instruction programme are based upon the suggested weighted average of FTE student enrollments and FTE degree credits. The hope is expressed that universities will select and advise students more carefully and that students in their turn will be diligent and realistic about their academic capabilities. Competition between universities is retained and academic standards safeguarded by a partial subsidy on unsuccessful students, the introduction or maintenance of external examining and the ability of universities to set their own fees. In addition, university autonomy is maintained. Subsidies for the instruction programme are, to a greater extent than ever before, coupled to success. (At the time of writing, South African universities have been warned of cuts to their subsidies if they do not curb campus politics (Sunday Times, 13 September 1987 :2), thereby adding a new criteria for the awarding of subsidies.)

The SAPSE formula aims at estimating reasonable costs for the various subsidizable university activities. An overall ratio of enrolled FTE students to FTE instruction/research professionals engaged in subsidizable activities equal to 13 : 1, is regarded as satisfactory for the residential university system as a whole, based on current South African socio-economic conditions.

Library collections are defined as 'fixed assets' in terms of the SAPSE system. Subsidies for fixed assets include two major categories of costs, viz. the initial costs of establishing an asset and the costs of replacing or renewing the asset, as it is used over its effective lifespan. The subsidy recommended that in the formula for fixed assets, provision be made for establishing an asset and for replacing or renewing an asset in physical terms. The cost unit for library collections is defined as :

a. 'The four cost units applicable to library collections are defined to equal the average prices of :

a book volume in the Human Sciences, C7;

a book volume in the Natural Sciences, C8;

a periodical volume in the Human Sciences, C9;

a periodical volume in the Natural Sciences, C10';

b. 'The values of these cost units are to be calculated annually from the data submitted by the universities in their SAPSE reports';

c. 'The values of these cost units in 1981 were

C7 = R19

C8 = R35

C9 = R39

C10 = R105

(Venter, 1982 : 95).

The provision of subsidies for increasing the total number of assets of an institution, is based upon the increase in the number of students. The provision for the renewal or replacement of these assets which are already possessed by an institution, is

based on the projected student number for the year for which the subsidy is being calculated. The increase in students is "defined to equal the difference between the projected number of students for the relevant year and that for the historical year for which the projected number of students was previously the highest-which need not necessarily be the immediate preceding year" (Venter, 1982 : 59).

It was assumed that in determining the provision for the replacement of library collections, a reasonable balance has been reached between the number of FTE instruction/research professionals employed and the annual replacement of library collections. In 1982 the average numbers of book volumes acquired annually per FTE instruction/research professional was 30 for the Human Sciences and 9 for the Natural Sciences. The average number of periodical volumes (augmented slightly to provide for the unaccounted library item categories) acquired annually per FTE instruction/research professional was 10 for both the Human and Natural Sciences. If these numbers are used as a basis for the formula, the provision for renewal of book volumes and annual periodical volumes per effective subsidy student expressed in terms of the relevant cost units is :

<u>Human Sciences</u>		<u>Natural Sciences</u>	
<u>Book Volumes</u>	<u>Annual Periodical</u>	<u>Book Volumes</u>	<u>Annual</u>
<u>Periodical</u>	<u>Volumes</u>		<u>Volumes</u>
1,7	0,6	0,7	0,8

If it is assumed that "all library material needs to be replaced

after a period of twenty years, it can be deduced that provision for increases in effective subsidy students must be made at a rate 20 times greater than the rate for renewal" (Venter, 1982 : 63). Therefore, provision for establishing a stock of book volumes and annual periodicals volumes per additional effective subsidy student expressed in terms of the relevant cost units is given below :

<u>Human Sciences</u>		<u>Natural Sciences</u>	
<u>Book Volumes</u>	<u>Annual Periodical Volumes</u>	<u>Book Volumes</u>	<u>Annual Periodical Volumes</u>
34	12	14	16

(Venter, 1982 : 100).

Published information on SAPSE was found to be very limited and the researcher was unable to locate any detailed discussion on the SAPSE formula and in particular the formula for libraries at post-secondary institutions. According to Gerrits and De Bruin :

Die huidige SANSO-formule vir die subsidiering van die aankoop van inligtingsbronne deur universiteitsbiblioteke ... is gebaseer op studentegetalle (effektiewe subsidiestudente en suksesvolle studente), navorsingsuitsette en pryse van inligtingsbronne, met 'n optimum grootte versameling per instansie as beperkende faktor. Die faktor van sisteembenutting (die keuse van eie aankope of terugval op die biblioteek- en inligtingsstelsel) word, sover vasgestel kon word, as gegewe aanvaar en nie spesifiek verreken nie (1987 : 19).

They also remark that there has been no explanation of how secondary education and research is to be financed as a national priority, and also note :

Verder veronderstel die SANSO-subsidieformule die bestaan van 'n nasionale infrastruktuur wat die probleme van 'n zero-groei-versameling by die individuele instansies moet ondervang (1987 : 20).

Quite whether university libraries (and universities for that matter) are receiving the amount that should be allocated to them under the formula is unclear, since subsidies have been cut by 15 per cent in 1987. Henderson has referred to SAPSE as a more equitable subsidy formula but "Unfortunately we have yet to taste those fruits and still await the full implementation of the new formula" (Daily Dispatch, 21 August 1987 : 7). As all South African universities are now financed according to the SAPSE formula, it would seem that for the first time in South African education that there is some measure of equitable distribution of funds on a national basis among all the universities.

#### 2.6.4 Summary

University libraries exist in a financial environment which is one of increasing scarcity. There is rapidly growing pressure for economy in the allocation of resources. Libraries, in particular, have often been singled out as a part of the higher education enterprise demanding closer scrutiny. Critics of librarians who have failed to respond to the realities of library usage or educational finance, cite the generalized 80-20 rule, viz. that 20 per cent of a library's holdings satisfy 80 per cent of a library's use (Trueswell, 1969 : 458-61). University libraries find themselves caught up in a struggle to respond to the changes



in their environment. In order to place the funding of South African university libraries in proper perspective, it was necessary to give an historical overview of their funding. The introduction of the SAPSE information system saw South African university libraries entering a new era of more efficient financial planning. An appreciation of the economic environment in which university libraries exist is a necessary first step in understanding the context of library finance and enabling librarians to participate in the inevitable campus debate about the library allocation. In this study of the funding of university libraries the researcher has attempted to highlight the main issues and, at the same time, to provide clearcut guidelines for the accurate analysis of comparative subsidy statistics.

### CHAPTER 3 UNIVERSITY LIBRARY STANDARDS

#### 3.1 INTRODUCTION

An established tradition of standards and methods is a reliable guide for university libraries to follow, particularly in South Africa where there is "rapid growth in the number of university institutions" (Lor, 1981 : 75). However, there may be no tradition to lean upon and library staff may need guidance in order to determine the standards of service they should be trying to meet.

The formulation of standards in this context must not be confused with the proposed imposition of standardization. A standard is taken to mean a "measure to which others conform or by which the accuracy or quality of others is judged" (The concise Oxford dictionary, 1976). Humphreys defines a standard as "either a goal to be achieved or an indication of sufficiency" (1970 : 144).

Library standards in particular have been further defined as :

... criteria by which ... library services may be measured and assessed. They are determined by professional librarians in order to attain and maintain the objectives they have set themselves. Standards may be interpreted variously as the pattern of an ideal, a model procedure, a measure of appraisal, a stimulus for future development and improvement and as an instrument to assist decision and action not only by librarians themselves but by laymen concerned indirectly and with the institution planning and administration of ... library services. The adoption of standards does not imply a loss of individuality, a curb to initiative or a pattern to which all ... library development must conform ..." (S.A.L.A., 1968 : 11).

## CHAPTER 3 UNIVERSITY LIBRARY STANDARDS

### 3.1 INTRODUCTION

An established tradition of standards and methods is a reliable guide for university libraries to follow, particularly in South Africa where there is "rapid growth in the number of university institutions" (Lor, 1981 : 75). However, there may be no tradition to lean upon and library staff may need guidance in order to determine the standards of service they should be trying to meet.

The formulation of standards in this context must not be confused with the proposed imposition of standardization. A standard is taken to mean a "measure to which others conform or by which the accuracy or quality of others is judged" (The concise Oxford dictionary, 1976). Humphreys defines a standard as "either a goal to be achieved or an indication of sufficiency" (1970 : 144).

Library standards in particular have been further defined as :

... criteria by which ... library services may be measured and assessed. They are determined by professional librarians in order to attain and maintain the objectives they have set themselves. Standards may be interpreted variously as the pattern of an ideal, a model procedure, a measure of appraisal, a stimulus for future development and improvement and as an instrument to assist decision and action not only by librarians themselves but by laymen concerned indirectly and with the institution planning and administration of ... library services. The adoption of standards does not imply a loss of individuality, a curb to initiative or a pattern to which all ... library development must conform ..." (S.A.L.A., 1968 : 11).

Standards are intended to give practical guidelines to university librarians, but as Downs and Heussman caution "minimum standards may come to be regarded by university administrators ... as maximum standards, thereby impeding the growth of a given library" (1970 : 28).

Havard-Williams believes it is the influence of science and particularly that of management science, which has influenced prevailing attitudes to standards :

... so that a distinction is being made between those standards which are precise, e.g. measurements for catalog cards or paper sizes, and those which concern standards of service ("guidelines") and are expressions of the best practice known at the time (and therefore subject to revision as practice improves) (1982 : 174).

The distinction between standards and guidelines is commented on by Jones who says :

If I follow your guidelines precisely they will at least enable me to repeat an experience and a level of performance which you have achieved in the past (Jones, cited in Havard-Williams, 1982 : 176).

Jones also suggests that 'guidelines' are based on the experience of the past, while 'objectives' and 'standards' look to the future (cited in Havard-Williams, 1982 : 174). It would appear that the development of library standards of service and performance is an attempt by librarians to secure "recognition of the value of libraries and of library work" (Vaughan, 1982 : 155). Furthermore, Havard-Williams maintains :

... many standards in the field of library and information science have been a codification of the best practice known, and they have been formulated over several decades on this basis (1982 : 174).

### 3.2 INTERNATIONAL STANDARDS

The need for international standards has increased significantly with the rise in resource sharing on an international scale. UNESCO and the International Federation of Library Associations (IFLA) have been keenly involved in the development of library standards. The International Standards Organization (ISO) also promulgates standards of a more technical nature.

IFLA approved its Standards for university libraries in August 1985. The standards were drawn up by the IFLA section of University Libraries and Other General Research Libraries, as a result of a programme on Standards for University Libraries which was presented by the Standing Committee at the 1981 IFLA meeting in Leipzig. 'Third World' countries whose librarians attended the Leipzig meeting were particularly interested in such standards. In 1983 the Section sponsored a UNESCO pre-session seminar in Munich, and arising from this was a recommendation to IFLA to formulate such standards.

The 1985 IFLA Standards for university libraries seek :

... to provide a means by which the quality of the library serving a university can be assessed, to offer guidance for improvements in the library, and to suggest a framework within which various countries or regions could develop their own statements of standards (IFLA, 1985 : 1).

The IFLA Statement on Standards for University Libraries encourages university libraries to support national efforts at prescriptive standards and "to develop various quantitative standards that reflect, local, regional, or national variations" (1985 : 1).

There are ten standards in the IFLA document relating to the purpose of university libraries, organization and administration, services, collections, staff, facilities, budget and finance, technology, preservation and conservation and cooperation.

### 3.3 DEVELOPMENT OF STANDARDS IN THE UNITED STATES

In the United States, the 1959 Standards for College Libraries created an interest and demand for university library standards. The 'overall effect' of these standards had been to upgrade some libraries and provide "substandard institutions with yardsticks by which to measure their deficiencies" (Downs & Heussman, 1970 : 28). The situation at colleges' libraries changed so significantly that "by 1970 these libraries had improved substantially in the very ways the standards proposed" (Lynch, 1982 : 33).

Many practical difficulties arose in formulating university library standards in the United States. These difficulties centered on the differing perceptions of the "'institutional environment' and 'mission' of individual universities [which] vary greatly and standards applicable to comprehensive universities may be invalid for specialized institutions" (Downs

& Heussman, 1970 : 28).

Other dilemmas stemmed from the lack of definition of the term 'university' and "disagreement over whether standards should be quantitative or qualitative" (Lynch, 1982 : 33).

In 1968 a joint committee of the Association of Research Libraries (ARL) and the Association of Colleges and Research Libraries (ACRL) - a division of the American Library Association - under the chairmanship of Robert B. Downs was appointed to develop standards for university libraries. The data presented in 1969 attempted to develop a set of criteria for excellence of university libraries based on the best current practices, rather than a statement of ideal standards (Downs & Heussman, 1970 : 28-35). Lynch submits that :

Using the data, a university library can be compared to the selected fifty in a number of areas. A library thus can be measured against a group of fifty peer institutions, or to an excellent group to which the particular library might aspire (1982 : 35).

Data was supplied under seven headings : finances, resources, personnel, space, circulation and public service, administration and professional school libraries. The average size of a collection as of 30 June 1968 was 1 9898 188 total volumes, with a median of 1 456 684 volumes and a 890 000 - 7 920 387 volume range.

The joint committee, reports Lynch, "continued its work. Having struggled with the definition of 'university', it adopted the Carnegie classification as soon as it appeared in 1973" (1982 :

36).

A preliminary report was submitted by Downs to the ARL in 1974. The committee proposed a number of recommendations which included a basic collection of 85,000 volumes, plus an allowance of 100 volumes per faculty member and 15 volumes per student. Additional allowances for each field of undergraduate and graduate concentration were recommended. A basic collection of 500 periodicals was recommended with similar additional allowances for every faculty member and every field of undergraduate and graduate concentration. The ratio of library staff recommended was 1/3 professional to 2/3 non-professional. Other recommendations concerned space for the library staff, collection and readers. A "matter of interest to many library administrators" (Lynch, 1982 : 35) was the relationship of total library expenditures to total university expenditures. 5% of the total operational budget of the university was recommended for the financial support of a university library. The committee further recommended that salaries and wages should account for between 60% and 65% of the budget; books, periodicals and binding, between 30% and 36%; and general expenses between 5% and 10%. The recommended library hours were 100 per week.

A final report submitted by the Downs Committee on University Library Standards to the ARL meeting of May 1975, was accepted "with the view that it would provide a good basis for further efforts to develop university library standards" (Encyclopedia of Library and Information Science, vol. 28 : 475). A list of ten items used to measure a library's resources was suggested. The



committee removed what Lynch calls "the fixed formula for staffing" (1982 : 37), as university libraries were going through a period of transition and there were doubts about the longterm validity of such formulas. As the report was not deemed suitable as a code of standards a new joint committee was appointed later in 1975. This committee, under the chairmanship of Eldred Smith, finally drafted the standards which were adopted by the ARL in 1978 and by the ACRL in 1979. According to Taylor it was only :

After considerable investigation and exploration of a variety of quantitative approaches, including specific performance measures, the committee concluded that no quantitative standards were presently applicable to the total number and range of institutions defined as university libraries (1980 : 265).

The standards finally adopted in the United States are qualitative in nature. However, the 1979 Standards for University Libraries do not totally avoid quantities, as they offer some measure of guidance to those in a position to make informed judgements about university libraries, and "the support those libraries provide to instruction" (Lynch, 1982 : 40).

### 3.3.1 ALA Standards for University Libraries

The 1979 standards are basically a series of principles followed by a commentary which amplifies the standard. The standards (without the commentary) are listed below :

(A.1) In order to support the instructional, research, and public service programs of the university, the services offered by a university library shall promote and facilitate effective

use of recorded information in all formats by all of the library's clientele.

- (A.2) In order to ensure maximum access to its collections and their contents, a university library shall maintain records of its collections which are complete, consistent, and in conformity with national bibliographical standards and requirements.
- (A.3) Within the limits of the university's particular responsibilities and priorities, a university library shall provide maximum access to its collections for all of its clientele.

The next three standards relate to collections :

- (B.1) A university library's collections shall be of sufficient size and scope to support the university's total instructional needs and to facilitate the university's research programs.
- (B.2) A university library's collections shall be developed systematically and consistently within the terms of explicit and detailed policies.
- (B.3) A university library's collections shall contain all of the varied forms of recorded information.

Standards relating to staffing follow :

(C.1) A university library shall have a sufficient number and variety of personnel to develop, organize, and maintain such collections and to provide such reference and information services as will meet the university's needs.

(C.2) Personnel practices within a university library shall be based on sound, contemporary administrative practice and shall be consistent with personnel practices within the university as well as the goals and purposes of the library.

The standards contained in the next section provide for facilities, equipment and materials :

(D.1) A university library shall have facilities which meet the present and anticipated future requirements of the university and its programs.

(D.2) Libraries shall be so located that the university community will have convenient access to them.

Administration and governance of the library are referred to in the following standards.

(E.1) The place of the university library within the administrative and governance structure of the university shall be clearly identified, and the responsibilities and authority of the library administration and its chief administrative officer shall be defined.

- (E.2) The university library's own administrative and governance structure shall be clearly specified and shall be consonant with the governance structure of the university as well as with the particular needs and requirements of the library.
- (E.3) There shall be a close administrative relationship among all libraries within the university to the end that library users may make full and effective use of library resources and services.
- (E.4) A university library's major policies and procedures shall be clearly defined and regularly reviewed.

Financial support for university libraries is contained in the last two standards :

- (F.1) Budgeting support for the university library shall be sufficient to enable it to fulfil its obligations and responsibilities as identified in the preceding standards.
- (F.2) The university library budget shall be a distinct part of the university's budget, and it shall be developed and managed by the chief administrative officer of the university library.

The standards reflect the shift in emphasis from collections to services - which university libraries in the United States have in recent years been more interested in. Since it is claimed that "All standards ... emphasize the primary objective of the library

arrangements for the backup libraries, and advise university librarians to let adult students taking courses for credit borrow from the main university library collections" (Vaughan, 1982 : 162).

### 3.5 CANADIAN UNIVERSITY LIBRARY STANDARDS

A committee of the Canadian Association of College and University Libraries prepared the Guide to Canadian University Library Standards which was published in 1965. Prior to this the Canadian Library Association (CLA) had disseminated the American standards for college libraries in 1961. The need for standards for larger libraries was realized - especially as the 1960s was a period of unparalleled growth for university libraries in Canada. A committee appointed in 1969 by the Canadian Association of College and University Libraries (CACUL) drafted a report entitled Trends for the seventies : guidelines for Canadian university libraries" (Encyclopedia of Library and Information Science, vol.28 : 477). This draft report was never formally approved.

In the 1965 publication Guide to Canadian university library standards, the numerical standards included a minimum ratio of one professional librarian to 300 students; a minimum book collection of 100,000 volumes, to be increased to 75 volumes per full-time student; 1,000 periodicals for 1,000 students and 7,250 for 13,000 students (University Library Standards Committee, 1965 : 19-20).

- to support the instructional and research programs of the institution of which the library is a part" (Lynch, 1982 : 39).

### 3.4 STANDARDS FOR UNIVERSITY LIBRARIES IN GREAT BRITAIN

The Library Association and government bodies or commissions have all issued standards for university libraries in Great Britain. The "two main documents" (Taylor, 1976 : 163) are the memoranda of evidence to the Robbins (1963) and Parry (1967) committees. The latter committee reported to the University Grants committee (UFC) which provides the universities with a large percentage of their income, and wields considerable influence over universities. The Parry Report stated that universities should assign six percent of the total university expenditure for the university library (1967: 148-56). The Standing Conference of National and University Libraries (SCONUL) model annual budget of £98,055 for books, journals, binding and sundries for an established university library of 500,000 volumes in a university of 3,000 undergraduates, 1,000 research students, and 500 teaching staff was also quoted in the Parry Report.

In 1978 the Library Association published its Standards for University Extra-Mural Libraries. The aim of this document was to lend support to approximately half of the universities in Great Britain which have "extra-mural" departments and to recommend "realistic minimum standards for university extra-mural libraries" (Taylor, 1980 : 279). These standards "are based on good existing practice, give guidance on number of titles and copies of books necessary for each course and on better financial

### 3.6 STANDARDS FOR SOUTH AFRICAN UNIVERSITY LIBRARIES

At the time of writing no standards have as yet been formulated for South African university libraries. However, in 1987, at a meeting of the Inter University Library Committee of the committee of University Principals, the IFLA Standards for University Libraries were adopted. The committee also proposed drawing up quantitative standards for South African libraries.

To this end South African university libraries can measure themselves against the IFLA Standards (cf 3.2) and also consult those of the ALA (cf 3.3.1) if need be. Both statements of standards are qualitative and not quantitative, although the ALA standards do "recommend statistical methods useful for comparing one library with others" (Lynch, 1982 : 33). Both standards are useful models on which libraries may base their own standards.

It is useful to note what Kesting has written in connection with standards at South African university libraries in a survey made in 1977 :

While university library standards for whites in South Africa are reasonably high in comparison to those of most Western countries, it seems obvious that the ethnic university libraries are struggling to maintain adequate levels of competence and basic self-sufficiency (1980 : 187).

### 3.7 SUMMARY

Each university is a unique institution with limited goals and limited funding. So it is reasonable to assume that such

institutions can ignore attempts to define a uniformity of purpose and goal as set out for example in the ALA Standards for university libraries (1979 : 101-110). Indeed, Ugonna believes this is "embodied in all discussions and recommendations on the standards for university library provision" (1983 : 127).

The 1969 standards of the ALA were seen as an attempt to tell each university what it needed on the basis of an idealized picture. However, those standards published ten years later by the ALA and IFLA in 1985 are in no way prescriptive. In a survey of the directors of university libraries in the United States in 1981 many wanted "more specificity and quantifiable minimum criteria" (Lynch, 1982 : 44). The minimal criteria they wanted were those such as contained in Standards for college libraries which state that : "a college library should have 85 000 volumes, plus 100 volumes for each FTE faculty member, 15 volumes for each FTE student, etc.; one librarian for each 500 FTE students up to 10,000, one for each 1 000 students above 10 000, etc.; .10 square feet per volume for the first 150 000 volumes ... (1975 : 277-79, 290-95, 298-301).

The emphasis in both the IFLA and ALA standards is on services - arguing in other words that a university library should be judged not by its collection size, expenditure or staffing, but on how well it serves its users. Indeed, the ALA standards begin with a section on services (cf 3.3.1), although they do not say anything about the quality of service. However, Stubbs believes that in certain ways the data can reveal where libraries are or where they should be. The appendix to the ALA Standards for university



libraries discusses "Quantitative analytical techniques for university libraries" and Stubbs considers the techniques suggested there, for ratio analysis and regression analysis are "a powerful tool" for making a statement about a quantitative relationship. The empirical criteria that result from the formula point to characteristics of libraries and are not "standards in the sense of goals" that libraries would like to strive for. Nevertheless, these criteria fail to reveal whether the library's resources are sufficient "to support the university's total instructional needs and to facilitate the university's research programs" (ALA, 1979 : 102). Stubbs concludes that we have not as yet "arrived at a means of comparing these criteria with measures of library activities, users and performance" (1981 : 537).

Vaughan maintains that the real value of standards lies in the practical information they provide, but warns that if "we regard standards as attempts to upgrade libraries ... it is difficult not to be pessimistic" (1982 : 169). The economic down-swing in a country can certainly result in declining library standards and "library standards are of no avail when libraries' controlling bodies have to cut their budgets; libraries, like all the other departments, suffer the consequences" (Vaughan, 1982 : 169).

Essentially, standards are useful for evaluating libraries. As Lynch states "the task of designing a set of standards becomes the task of designing an instrument of evaluation" (1982 : 46). Although, according to Kaser, academic librarians were in the past less interested in standards for the purpose of library evaluation than as "a manifestation of societal concurrence that

what they do is important" (1976 : 115). However, no matter what the standards are, they are of limited value with regard to the many intangible factors involved in measuring qualitatively the extent to which a university library is effectively serving its students.

#### CHAPTER 4 : UNIVERSITY LIBRARY SERVICES

The essence of the university library today is concentration on service - service primarily to the university and in a broader sense also to the outside community. Wilkinson defines 'service' as "the dynamic response to existing and potential needs for the present and the foreseeable future" (1970 : 102). A more conventional definition of 'service' is offered by Webster's Third new international dictionary (1966) :

"to meet the needs of ... to provide information or other assistance to ..."

Traditionally it has been the general understanding that the function of a university library was to provide books and periodicals needed for teaching and research, and that users had to rely very much on their own ability to find their way around the library. Little emphasis was placed on attempts to provide active information or bibliographic service since it was considered part of a user's education to discover material for himself. However, since the second World War libraries have been expected to an increasing extent to do far more for their users, and especially for the student body. Dix expressed the growing new consensus by insisting that the function of university libraries is "not just to build collections; our function is to get university students to use books" (1969 : 23).

The main objective of any university library must be to make the maximum possible use of the services it provides (cf 2.1.1.2). The provision of full scale reader services designed to facili-

tate and encourage use of the library would also involve some measure of actual instruction in library use (cf 4.5.7).

Reader's services (cf 2.) have been defined by Gelfand as embracing two main aspects, viz.:

- a. 'library materials (which) should be highly accessible and easily available for use by all members of the university community'; and
- b. 'assistance in the location of materials and in the use of the library for information and research (which) should also be available' (1971 : 95).

These two aspects of reader services hinge around what Gelfand identifies as the two main areas of activity underlying service, viz. "the circulation (or loan) service and the reference (or readers' assistance) service" (1971 : 95). Thompson, however, has expanded the concept of reader services to include guides to the library, library instruction, photocopying and photographic services, and audio-visual materials (1970 : 90 - 103). Irrespective of the nature and range of the services offered, Michalak believes that the library must have a 'philosophy of service' with librarians reaching out to individual users or groups of users in order to:

- a. 'identify their information needs';
- b. 'identify the problems they encounter in attempting to fulfill these needs';
- c. 'convey and demonstrate the range of services available in the library'; and
- d. 'bring back to the library an appreciation and understanding of users needs and the methods and tools of scholarship and instruction' (1976 : 257).

The common element in library services in general, according to Line "is that they are personal - in two senses, i.e. that they are given to individuals, and that they are often given in person" (1974 : 3), although it should be noted that Line's compatriot Roberts, has observed that in practice "with few exceptions ... concepts of personal service remain comparatively undeveloped in ... university libraries" in Britain (1977 : 470).

The quality of service provided by a university library will depend to a very large extent upon its effectiveness in acquainting its users with the total resources of its collections. It is generally acknowledged that libraries need to play a more active role in assisting readers, that users need help and guidance in acquiring information and, "given certain prerequisites ... the university library should provide an information service to fulfil this role" (Rhodes & Evans, 1977 : 13).

#### 4.1 BASIS FOR SERVICE

On what base do services at a university library rest? It would appear from the literature that university libraries tend to base their services on a purely pragmatic approach (Buckland, 1983; Dongherty & Blomquist, 1974; Gelfand, 1968; Stoakley, 1982; Thompson, 1970). This observation is not surprising, given the impression that most university libraries are still inclined to emphasize the acquisition of resources rather than their dissemination.

The overall rationale evident from the section dealing with standards for library services in the ALA Standards for university libraries (cf 3.3.1) may provide university libraries with standards which would be appropriate to serve as such a base. Qualitative and quantitative guidelines given in the standards can be used by university librarians to support their decisions or motivations concerning library service in exchanges with the university community at large.

South African university libraries see service to their users as a major challenge at present - to respond "sensitively and meaningfully to the diverse and often unarticulated needs of a wide variety of potential user groups" (Lor, 1981 : 78).

#### 4.2 The library user and his use of the library.

In the context of the university library the range of users requires little definition, falling clearly into the three main categories of undergraduates, postgraduates and academic staff which jointly constitute the library's 'primary clientele' (ALA, 1979 : 102). In addition there are likely to be other users who are members of the community at large. It must be remembered of course, that the term "user" can include both the actual and the potential user who may often be a non-user of the university library in practice (Exon, 1978 : 352). In the provision of library services to its actual and potential clientele, librarians need to take into account the differing competencies of individual users or user groups, with a view to accommodating the resultant differences in approach by academic level, by dis-

cipline or by other variables (Genaway & Stanford, 1977 : 194).

Of the three main groups identified, the undergraduate, are of focal importance for the purpose of this study. Although it is useful to remark on the relationship which library staff have with the academic staff (which may at times amount to degrees of animosity , prompting Greenwood to comment acidly that "many academics regard themselves as belonging to a superior breed and either refuse to recognise or display little appreciation of the professional expertise and training of the librarian") (1977 : 559), the issue is of indirect rather than direct concern to this investigation. This is true in so far as a lack of mutual regard and cooperation between academic and librarian may well have a deleterious effect on the relationship the librarian has with the student user. Lecturers are a prime factor in motivating students to use the library and if this encouragement is lacking, student use of the library diminishes (Hostrop, 1968 : 161).

In a survey in 1978 by Emdad and Rogers at Pahlavi University in Iran, it was revealed that the attitude of academic staff towards the library and its role in the educational process is extremely important when conveyed to student users. They found that very few of the lecturer respondents in their study mentioned or recommended books in class, and that of the few lecturers who did hand out reading lists, commented that most students were satisfied with the lists despite the fact that some of the books recommended were not available in the library or the university bookstore. Emdad and Rogers concluded that students on the whole preferred taking notes to reading books, with students remarking

that examination questions were usually chosen from given texts or class notes, thus rendering it unnecessary to read any additional material for examination purposes. A typical comment, they noted, came from a third-year student in engineering who said there was no need to buy books because the class notes were sufficiently comprehensive (1978 : 452). The researchers were led to believe that academic staff promote student use of the university library both by the example they set and by their teaching methods (1978 : 455).

It is therefore reasonable to ask such questions as: Why students should use the university library at all? What effect does using the library have on students' academic success? Against this background Whyte analyzed the borrowing records of Australian students against their academic records at the University of Sydney in the late seventies, finding that those students who borrowed heavily from the library generally had greater academic success than those who borrowed little (1977 : 285). However, Mann in his research at Sheffield University in the early 1970s, found "no apparent connection between failure in examinations and a lack of borrowing or purchase of books" (1976 : 9). He suggests two explanations, viz. :

- (a) 'students are doing subjects where only very restricted use of books is necessary, thus obviating the need for students to buy books'; and
- (b) 'while there are some subjects where more reading is required, in regard to others, students can get an arts or social science degree on virtually lecture



notes alone' (1976 : 9 - 10).

Nevertheless, in the interests of more effective learning and greater efficiency in their future professions, undergraduates must be trained as library users. A university education must encompass more than just reading books recommended by academic staff or the passing of an examination. Anyone who leaves a university without knowing how to use a university library has a very temporary expertise of his discipline. Stuart cautions that there is always a danger that "students will leave the university without knowing how to find information in their subjects" (1974 : 19), while Whyte maintains that "a university graduate, be he scientist, historian, or teacher who does not know how to use a library and does not keep up with his subject is a dangerous person to employ" (1977 : 285).

It is thus incumbent on a university library to work towards frequent, skilled undergraduate use of its library by providing "the most generous, efficient service ... [it] can afford" (Evrard & Waddington, 1971 : 351).

#### 4.3 THE LIBRARY AND STUDENT READING.

Services directed at the student may promote a library-student relationship but the library also acts as an intermediary between the lecturer and the student - the bookstock being the foundation on which all services are built. Obviously the library provides students with books and other library material - prescribed or recommended reading, and even extra-curricular reading.

University libraries therefore, have a far greater responsibility towards the undergraduate than merely providing textbooks. The library must inspire the student to read, and play a part in teaching him how to study (Perry, 1956 : 20), since, what Page terms the 'less good student', will hardly ever venture outside the limits of his prescribed reading unless he is actively encouraged to do so (1978 : 349).

Students are expected to purchase their own copies of textbooks set for study in a syllabus. Invariably there are other books which lecturers consider 'essential' reading, but which students are not expected to buy. Libraries are expected to provide such additional material for sections of courses which cannot be included in the lecturing programme or which is supplementary to certain courses. Frequently, 'assigned reading' is prescribed by lecturers in connection with assignments or tests.

Reading lists, Page suggests, are "something of a bugbear to librarians" (1977 : 321) as books listed are often not available in sufficient quantity or time for students in a class to read them within the date limit. Mann believes that students are frequently bewildered by the long reading lists given to them, the lack of priorities in the list and the lack of advice on what to borrow. He feels that librarians should take on a more positive role in working with lectures to suggest specific information sources (Mann, 1976 : 10 -11). The librarian invariably "feels that he gets the blame, whereas the lecturer did not give him sufficient notice of which books were to be set" (Page 1977 : 321). This is a recurrent problem in university

libraries throughout the world but the librarian may be able to induce the lecturer to choose essay topics more related to library bookstock by playing the 'information stimulant role' which Higham puts forward (1976 : 37). Library staff could compile bibliographically accurate reading lists which range more widely and are longer than those given out by lecturers. This would lead students to discover a wider variety of texts and require "a more vigorous exercise of their judgement" (Mews, 1970 : 10).

Apart from supplying undergraduate and research material many university libraries have become responsible in recent decades for the provision of extra-curricular reading. This idea is part of the concept of the need for a broad, liberal education whereby students are exposed to a broad range of material. The major objective of extra-curricular material in this context is therefore not for entertainment purposes but rather as a component of the general educational process of which the library is but a part. The provision of such material depends inevitably on the funding available, and on the extent to which students have ready access to well-stocked public libraries. If the university libraries are situated "in rural areas with sub-standard library services" (Page, 1977 : 323), then adequate provision should be made to cater for students' extra-curricular needs. Another argument in favour of such provision is that on the whole students tend to spend a high proportion of their time on the university campus; hence if librarians want to encourage students to read widely, the library is the place where such provision could be made profitably. Likewise, the concept of

"community library service" encourages librarians to make provision for such needs (Swanepoel & Boon, 1986 : 88 - 9; Zaaïman, 1987 : 2). The growing interest in popular culture as a phenomenon worthy of academic study similarly requires libraries to collect material that in the past has been considered 'pop-fiction' and consequently, 'popular trash' (Sewell, 1984 : 450-461).

Page proposes that the library can play a positive role - setting aside a very small portion of its budget for the purchase of inter-disciplinary and extra-disciplinary material (1977 : 324). It is then incumbent on the library to ensure that such material is used. Saunders has recommended the provision of a 'browsing collection' in a separately housed room in the library, or kept separately within a general reading area (1967 : 53). Browsing is important to most academic staff and students but for librarians the possibilities it opens are limitless. The library, if it has regular class-contact periods as in some British universities, can use such material in library-tutorials to develop students reading interests.

The library therefore can contribute significantly to the undergraduate's education and general intellectual development at university. A programme designed to promote student reading is one way of the library assuring that it will be effective in its educational role. Rogers and Weber consider that the university library "is in a unique position to promote reading; as a service organization, it must facilitate reading; as part of a pedagogical institution, it should play an active role in making

books a significant part of a university education" (1971 : 197).

The ideal of undergraduate service would be for a university library to build up a collection containing sufficient multiple copies of the books that the undergraduate must read, as well as books that would enable him to read beyond the immediate demands of his curriculum, but yet within the broad boundaries of cognate interests.

#### 4.4 STAFFING READER SERVICES.

The staff manning this service should have what Engle calls "an active philosophy of librarianship" (1986 : 30) since such a philosophy may provide a sense of direction for those taking counter against what Buckland calls the 'bitiness' of librarianship - one feature of which becomes evident in the hustle and bustle of "people with radically different backgrounds ... busy with very diverse activities" (1983 : xi).

Increasingly, university libraries have been devoting more of their staff resources to reader services in their growing awareness of their responsibility to have library material used more intensively. Ideally libraries would like to have staff complements large and varied enough to allow for adequate subject specialization or to "match the full range of academic departments with qualified staff" (Fielding, 1977 : 405). However, the traditional pattern in the countries under survey has been to staff central reference departments with generalist librarians, rather than decentralized reference units with subject spe-

cialized professional staff. This situation is exacerbated in university libraries where librarians as generalists must grapple with the full range of higher education disciplines whereas the academics' and their students are normally specialists in their diverse fields.

Attempts to overcome this problem resulted in the creation of subject divisional libraries (cf 2.2.4.1.2) with subject specialist staff arrangements in some university library systems (Johnson, 1974 : 113 - 157). Under such a system, individual librarians are appointed to to combine a range of professional duties relating to particular subject areas, including the tasks of selection, classification, reference liaison with departments, reader instruction and information dissemination. This pattern has developed in recent years at a number of libraries in Britain, West Germany and in South Africa, most notably at the ~~sa~~ Library (Colenbrander 1984 : 23 - 27).

As a university increases in size, disciplinary range and research activity, the greater the need for subject specialization in its library services. Hence to an increasing extent, university librarians will have to become subject specialists. Knowledge of specific disciplines or groups of disciplines will be equally important as professional knowledge and expertise, and in this manner the nature and composition of the staff within libraries will change as a result of the relatively rapid growth in the number of specialists or specialist bibliographers in staffing establishments. The corresponding change in staff composition, will of necessity significantly alter the personnel

of libraries.

Subject-specialized librarians will be appointed to positions in their fields of expertise, not only to keep abreast of developments in these fields; the new dispensation will inevitably likewise "encourage the implementation of new technologies" (Colenbrander, 1984 : 23). As technological advances are made professional library staff in their turn will be expected to develop specific subject expertise and will need to attend courses frequently to keep up with advances in computer based reference services. This calls for recruitment of staff with a bent for computers. Libraries intending to computerize are inhibited by the shortage of appropriately competent staff, from putting their plans for automation into effect. Some twenty years ago already, the Parry Report had drawn attention to the fact that more staff may be needed when a library begins its automation programme, and the "desirability of subject knowledge for the proper use of information systems" (1967 : 145).

The staffing of the reference service desk is critical and Schawartz and Eakin have recently described the reference service standards drawn up to establish measurable criteria for the performance evaluation of librarians at the University of Michigan. They also list the qualities staff should have and which are associated with good reference service, categorizing these under the three headings of behavioral characteristics, knowledge and reference skills (1986 : 5). Their standards serve as a useful checklist of criteria (cf 3.3.1).

Rosenblum charges that a model for the reference librarian is that of "library ombudsman, one who enables users to negotiate all the pitfalls of the system, not merely obstacles to research" (1985 : 73). The task of the reference librarian may be simply to "obtain facts and make intelligent use of them" (Pings, 1976 : 123), but Durey has laid emphasis on the need for the reference staff to be instructed, arguing that while their prime function is to assist their readers, there is a danger that they may appear too 'preoccupied' with routine duties they are required to do between answering enquiries (1973 : 326). Thus the often conflicting demands placed on the shoulders of the reference librarian often impose burdens on him which ultimately inhibit the effectiveness and efficiency of his user services.

Wilkinson observes that in attempting to serve the undergraduate's sometimes complex information needs "one has a feeling of watching a traffic cop pointing to possible locations of information. There is little exchange, little dialogue, little interplay" (1971 : 1571). It is self-evident that finding suitable staff "for what is a demanding as well as rewarding job" (Mews, 1970 : 10) is one of the greatest challenges facing a university library.

Staffing arrangements are complicated by the long service hours. Davis suggests in this respect that librarianship students can be used to good effect to man "the reference desk during evening and weekend hours, perform bibliographic checking, and supervise student assistants; they perform, in short, as librarians" (1978 : 319). However, the availability of professional help at the



reference desk is basic library policy, and hence at odds with Davis's suggestion. Biggs decries the use of nonlibrarians "to deliver this most 'professional', most judgement-vulnerable" of services (1985 : 69), where students and academic staff are in need of guidance and instruction in making the most out of a library's resources. A professional member of staff should be available for ensuring professional responsibility for consistent quality of reader service, although Rogers and Weber believe that a "bright subprofessional assistant can serve to handle the majority of directional and interpretive questions" (1971 : 210).

#### 4.5 ORGANIZATION FOR SERVICE.

The traditional organization of reader services departments in a university library encompasses the functional units of the reference or enquiry desk, the circulation section, reserve or short loan collections, the information service (including current awareness service) and other services such as photocopying and computerization.

Reader services departments not only show students how to use the library and teach them how to find material in the collections. They are also expected to develop good liaison with the academic staff to ensure that lecturers know what is in the library, and so that librarians and lecturers cooperate to help students learn more effectively.

#### 4.5.1 Access.

In theory the best service a library could offer its readers would be to provide a fully comprehensive collection which would always be immediately available. The reader would be able to use the material where and when he wishes. This brings us to the need for ease of access (cf. 2.2.4).

In most university libraries of the countries under survey the major portion of the collection is invariably on open access for the use of the whole university community. Closed access is applied in certain libraries for such purposes as little-used research material and rare book collections. However, sometimes the latter may have controlled access, often limited to senior students and academic staff. Closed access reduces the problem of items being deliberately hidden or accidentally mis-shelved. Book collections in closed access are normally not for loan although the rule may sometimes be waived. There are also other collections which are particularly suited to closed access such as audio-visual material, microforms, and material not in classified order. University theses, expensive art books and special collections may similarly be housed in closed access areas.

#### 4.5.2 Hours of opening.

Limited hours of opening naturally affect service to users adversely. Ford suggests that when considering the organization of the university library "there is an increasing body of

evidence to suggest that there is a large amount of latent demand which can be stimulated by improving the accessibility or availability of material" (1973 : 88).

Long hours on the other hand offset limited seating accommodation (Kuhn, 1969 : 199), some libraries provide for students who prefer to work until the early hours of the morning by providing what Kuhn refers to as 'peripheral areas' outside the controlled core of the library system (1969 : 200). Dix has suggested opening the university library on Sundays from ten o'clock in the morning and opening a reading room in the library until three o'clock in the morning as there would be justifiable use for such a facility on large campuses (1970 : 22).

When a university has large numbers of part-time students there is an even stronger case for libraries remaining open late into the evening and at weekends. Access is important time-wise for the older, mature undergraduate who is studying part-time, because many are working full-time and therefore need flexible library service hours (Fielding, 1977 : 400).

Wilkinson reporting on services to undergraduates at the universities of Michigan and Cornell, that the libraries were open for 101 and 107 hours respectively. Reference assistance was available at all hours the library was open during the semester with professional staff members on duty three-quarters of the time and graduate students manning the reference desk for the other 25 per cent of the time (1971 : 333). In a survey of the patterns of service of Canadian university libraries by JB

Wilkinson, it was found that librarians had a 'genuine conviction' that "users have a right to insist upon reasonable hours of service" (Wilkinson, 1970 : 103). Wilkinson concluded that a supportive library service must comply with the demands of users even more than with their needs (1970 : 103).

#### 4.5.3 Circulation

The circulation department's major responsibility is transaction control, i.e. the recording of all loans, the recalling of overdue material and the registering of all borrowers. Circulation desk staff generally ensure that library material is returned to the shelf correctly (Rogers & Weber, 1977 : 214), and maintain statistics of library use. The department must also take responsibility for protecting the collection, as "the more rigid the control point the less chance for theft" (Encyclopedia of library and information science, vol. 5 : 10).

The users of university libraries do not all enjoy the same borrowing privileges, "these differ according to the status of the user of which there are three main categories: undergraduates, postgraduates and academic staff" (Thompson, 1970 : 90). The typical two-week loan period is allowed for students (Murphy & Johns, 1977 : 519) while lending rules for postgraduates and academic staff are usually longer. Problems can occur when academic staff "hold books for several years" (Tauber 1967 : 173). As the loan period has a definite influence on the book retention time, each university library decides on the loan period that suits the size of its clientele, the peculiarities of

materials and building conditions" (Rogers & Weber, 1977 : 214).

Amongst the problems confronting the circulation department is the constant task of locating material and speeding up service to users. Basic amongst the problems which result from the unavailable books, is the inability to locate students who hold overdue material or the failure of these students to respond to notices to return books.

In a university library, unlike many public libraries, it is important to know where items are at any particular time, since the need to recall material may be critical. In large manual systems this can be a difficult and cumbersome procedure. Problems of this nature have prompted libraries to look at mechanized circulation systems. The circulation system, because it "involves a large amount of daily maintenance and at the same time needs to have available records of current transactions is ideally suited to computerization" (Wilcocks, 1986 : 126).

Another constant problem to all libraries is the loss of library material which is in effect "a serious erosion of budgetary funds" (Encyclopedia of library and information science, vol. 16 : 343). Boss reports that library security has become 'a growth industry' (1980 : 683) as more libraries install electronic detection systems. Until the introduction of a mechanized device, libraries placed shelves near the entrance where bags and briefcases could be left, and used exit turnstiles to control unauthorized removal of library material. The electronic theft detection systems, which have replaced these measures and are

marketed for library use, all operate in basically the same way.

As Romeo explains:

In these systems either a full circulating system triggers an alarm when a sensitive piece concealed in a book not desensitized in the charge-out process is taken through a detection field, or the bypass mode triggers an alarm when a book treated with a permanently activated piece is taken through the detection field without having been inspected by an attendant and passed around the detection points (Romeo, 1980 : 1-2).

Watstein reports that since the mid- to late 1970s most libraries in the United States have installed electronic security systems (1983 : 18). In a survey conducted in 1976 by Romeo amongst 31 American university libraries, it was found that the most favoured electronic detection system was Tattle Tape, with Checkpoint Mark II the preferred second choice (1980 : 2). In South Africa, Bookguard is now available which is a bar-coded protective label which can be computer linked to the library records system, and can contribute to eliminating some of the existing circulation records administration (SAILIS, 1987 : unnumbered page insert).

In Watstein's survey in 1983 of 26 members of the Research Libraries Group's Preservation Committee, 80 per cent of the respondents indicated that book mutilation was a problem in their library in general. Amongst the methods students employed 'to beat the system' were learning or cutting off sensitized pages, throwing material out of windows and removing spines (Watstein, 1983 : 20). Boss even acknowledges that "it is generally recognized that any electronic detection system can be

compromised" and suggests that the electronic security system should be the last step in a comprehensive security plan rather than the sole solution to collection losses (1980 : 683).

In order to counteract the problem of book losses, Watstein believes that libraries should acknowledge that book mutilation is an unwelcome by-product of electronic security systems, and should recognise that the answer is in educating the user. Students should be made aware of the fact that methods of compromising security systems affect the quality of service and also "affect book budgets already eroded by inflation" (Watstein (1983 : 23). Watstein maintains that "a vigorous publicity campaign that instructs users on the impact of book theft and mutilation" could alter users' perceptions on mutilation and replacement. Raising staff consciousness of the problem and stipulating a procedure to follow upon the discovery of mutilated items is another alternative Watstein offers (1983 : 24 - 5). The staffing of the circulation department is critical in this respect, because if the circulation desk "is staffed for long hours by people who lack the interest and the interpersonal skills to be effective in screening patrons" the illegal removal of library material is inevitable (Boss, 1980 : 683).

Staffing the circulation department can present problems, as invariably the department has a very high proportion of library assistants "so that responsible librarians are few in number" (Rogers & Weber, 1971 : 232). In a university library a full-time professional staff member is invariably in charge of the circulation department. The organization of the department, the

are now being introduced, and Horny expresses the hope that this will provide potential for 'broadened training' of users (1982 : 1).

The decision by a university library to adopt an on-line catalogue as a replacement for the card catalogue "is motivated by the desire to improve service to users" (Richards, 1984 : 5). While research has been done on user behaviour at card catalogues (Palmer, 1972; Tagliacozzo, Rosenberg & Kochen, 1970), Richards decries the "paucity of reliable information about user needs and user behaviour in an online environment" since there have been inaccurate interpretations of the findings of these studies (Richards, 1984 : 5).

The problems experienced by users with the conventional card catalogues often mean that users "for go opportunities for bibliographic instruction or hesitate to ask questions about search strategy" (Horny, 1982 : 1). In his study of students at Yale University, Lipetz found that graduate students are the heaviest users of the catalogue, closely followed by undergraduates, while academic staff use is light by comparison (1970 : 7). He also notes that more than one third of the catalogue searches which first year students attempt is "for documents listed on printed course assignment lists" (1970 : 50). Failure to locate items in the catalogue Lipetz attributes to faulty search technique or failure to persevere, and concludes that "there is more room for improvement in catalog service through instruction of users in the proper use of the catalog" (1970 : 51).



The introduction of an online catalogue will mean that the increased accessibility of information will enhance reference work (Gorman, 1982 : 474) and require more effort on the part of library staff to offer bibliographic instruction (Gouke & Pease, 1982 : 142). The fact that an online catalogue has an interactive capability will, according to Richards "enable us to provide better assistance to users than we have been able to offer" (1984 : 8).

The development of an online catalogue will require library staff to become involved in teaching its use to users - to demystify it. Therefore in order to teach online catalogue use, Baker maintains that the learning objectives must be stated and "serve as the basis for teaching and evaluating instructional methods in online catalogue use" (1986 : 91). To the user, the online catalogue is seen merely as a means of accessing a library's collecting and users do not necessarily see any incentive in acquiring the skill to use such a catalogue. The instructional programme which is based on the conceptual framework Baker describes, should assist users in transferring their skills from one system to another without too many problems (1986 : 90 - 96). The most significant difference between the traditional card catalogue and the online catalogue Hildreth claims, has to do with "the way the user interacts with and is assisted by the online catalog" (1982 : 32).

In those university libraries which still maintain a card catalogue, assistance to users (notably student users) is a prerequisite of service. A card catalogue in a university

library is by its very nature large and complex. Moss contends that it "simply serves to hamper the students' efficient use of the collection" and surveys reveal a marked reluctance on the students' part to use the catalogue except as a last resort (1966 : 94). Burke also concludes that the card catalogue is "another stumbling block" (1970 : 400). The obstacle that the card catalogue presents results in a tendency for students to "rely on a sense of location and to go directly to the shelves to search for what they require" (Moss, 1966 : 94). Possibly this strategy may not be altogether at odds with views on how students should access the collection, however since, as Braden has pointed out there are two different approaches, the "One advocates finding the book from the shelf, while the other advocates access through the card catalogue (1970 : 395).

The card catalogue may well not be used to its full advantage by students. Endorsing this view Dennison claims that the catalogue "is not, as currently utilized, a good indicator of of the level of services provided by the institution's learning resources program" (1978 : 127). Whatever the catalogue used is immaterial it should be coherent, logical and "a positive incentive to exploration of the stock" (Brice, 1978 : 86) by the student user.

#### 4.5.5 Reserve Collection.

Reserve or 'short loan' collections are intended to control and provide access to material required by students for course work. Almost all university libraries have some kind of reserve system. Special arrangements are often necessary when particular books

are in heavy demand. Such books are 'frozen' by being kept in an open or closed access reserve collection and are loaned for either very limited periods (sometimes for one or two hours or even overnight), or not loaned at all (Moss, 1978 : 361). Severe fines may be imposed if a user exceeds the loan period.

Depending on the institution concerned, reserve collections may contain multiple copies of textbooks (cf 4.3), photocopies of journal articles or papers, and even past examination papers (Gistitin, 1977 : 40). The collection tends to include constantly changing items, since the demand for such items is usually in response to prescribed reading programmes. If the university has a huge number of part-time students there is a need to purchase more duplicate copies of reserve books than a library would otherwise do (Talmadge & Kidman, 1962 : 519).

Inevitably a reserve collection cannot be expected to function efficiently without close cooperation between the library and academic staff (Peacock, 1972 : 135). Library staff encounter problems with academic staff recommending books for inclusion in the reserve collection at short notice, or not making sure the book is in the library (cf 4.3). This can result in friction with users who see the library staff as being at fault. Part-time academic staff who lecture at branch campuses may have a habit of never suggesting items for reserve and this too can present problems for library staff (Talmadge & Kidman, 1962 : 519) (cf 4.3).

Thompson believes that reserve collections often include the

wrong choice of books, i.e. containing items which if in general circulation might be better utilized (1971 : 172 - 3). Superfluous transfer to the reserve collection may also occur when lecturers place books on reserve in the knowledge that such titles would then be more readily accessible to part-time students who have limited time schedules. Under normal circumstances these same books would not have been placed on reserve (Talmadge & Kidman, 1962 : 521). The suitability of items for inclusion in a reserve collection must be kept under constant review because unchecked, reserve collections can grow very quickly (Peacock, 1972 : 132).

Most university libraries control the size of their reserve collections by continuously weeding out unused material. Non-use can be established by checking circulation figures - a controlling device greatly facilitated by computerized transaction procedures. Unless academic staff (assisted by the library staff) do not regularly reevaluate the live selection of reserve books in their respective disciplines, this can result in many books becoming 'hidden away' and unused. Gistitin, commented in her investigation of a decade ago into the low circulation of reserve items at the Capricornia Institute of Advanced Education in 1976, cites the cause as being in the nature of the collection:

Either the wrong, unwanted books were in the collection, or students were not aware that wanted books were held there. When statistics were analysed it became clear that books placed on reserve by certain lecturers were issued less than others. It seems that a measure of responsibility must rest with the lecturers, whose failure to advise students can result in classes' ignorance of what to look for and where to

find it (1977 : 40).

While Gistitin places the onus on lecturers to publicize the reserve collection to their students, it is the library's responsibility to ensure that adequate records are kept and made available for student consultation. Most reserve systems provide a listing of the material held on reserve. Listings may be by author, title or by course. Computer printouts of items on reserve may also be provided where such collections are part of an automated system. Some university libraries produce annual or bi-annual lists for academic staff indicating the use patterns of titles they had requested the previous period (Jacob, 1977 : 457).

The disadvantages of a reserve collection are that it makes considerable demands on staff time, removes books from their proper places on the shelves, prevents such books being discovered by browsing, and encourages what Peacock calls a "short loan mentality" in students (1972 : 132). Harrop - a critic of reserve systems - considers that prescribed loan periods are often too short, and that students would rather not use the required items if it is possible to obtain them from other locations, or because they would not be able to return the books in time after an overnight loan, thus resulting in a fine being incurred (1982 : 5).

The advantage of a reserve collection if properly planned and administered, is possibly that it presents the only fair way of making a single title available to large numbers of students.

"The provision of a short loan collection is an attempt to meet extreme demands"(Ford, 1973 : 92) and enables a library to have a measure of freedom to react quickly to such unforeseen demands (Peacock, 1972 : 132).

#### 4.5.6. Reference Service

The Standards Committee of the ALA Reference and Adult Services Division has laid down developmental guidelines for reference service as consisting of three types, viz.:

- a. 'personal assistance is offered to users with information needs';
- b. 'formal and informal library use instruction is given - designed to provide users with guidance and direction in the pursuit of information'; and
- c. 'indirect reference services is provided to furnish the user with access to information and bibliographical sources through inter-library loans and inter-agency cooperation' (1979 : 275).

The teaching function is included as a major part of the total reference service.

Many definitions of reference service have been put forward, too many to identify and analyze for the purpose of this study (Bushnell, 1951 : 28; Butler, 1943 : 11; Kaplan, 1958 : 218; Katz, 1978 : 6 - 7; Rothstein, 1953 : 1 - 15; Wilson, 1956 : 209; Wynar, 1976 : 337 - 42). Rader has provided a succinct summary of the main elements of reference service:

Reference service deals with disseminating the function of libraries. it provides information seekers with direct, personal assistance which varies considerably in different types of libraries (1980 : 96).

The origins of reference work date back to 1876 when Samuel Swett Green coined the term (Grogan, 1979 : 20). Traditionally, reference service has been built on the notion of responding to individual needs (Adams, 1980 : 83) whereas at present, reference service in libraries consists of what Rader calls the 'two approaches'. The first is the conservative or minimum approach which emphasizes the teaching function of reference work "by guiding the users toward the utilization of bibliographic sources in order to make them ultimately self-sufficient" an approach predominant in most academic libraries. The second, i.e. 'liberal' or 'maximum' approach in turn emphasizes "the delivery of specific, relevant information to the user by the reference librarian", and predominates in special libraries (1980 : 96).

In each approach there are three components:

- a. 'library use instruction';
- b. 'assistance in the identification, selection, and locating of library materials'; and
- c. 'provision of ready reference information (e.g. facts, names, statistics)' (Encyclopedia of Library and information science, v. 25 : 218 - 21).

Any reference service is a major source of information and reference advice, but it is the teaching function of reference which has become the aspect of much closer scrutiny in recent years. Rader identifies the reasons for this as:

- a. 'renewed and increased interest in library use instruction';
- b. 'faculty status for academic and school librarians';
- c. 'justification of library personnel budgets';
- d. 'computerization of libraries'; and
- e. 'justification of librarianship as a profession' (1980 : 97)

Arguments for and against the teaching function will be dealt with more extensively in 4.5.7, and 4.5.7.5, but it is useful to note what Moss writes on reference service. He argues that reference service really functions "to assist the self educator, to train the student to train himself, and the staff must always be available to give assistance to the student at each successive stage towards the full bibliographical control of his subject" (Moss, 1978 : 365).

Good reference librarians Adams maintains, "have always tried to teach the user in the process of answering his or her question" so that the user learns the basic skills that may be used in the next problem he encounters (1980 : 83). The provision of reference services to undergraduates involves guidance from the simplest level to "the fullest exploitation of relevant literature, a knowledge of the limitations of bibliography, computerized literature searches and so on: (Revill, 1981 : 107).

Durrance believes that the reference service should exploit the benefits for library users by "well-designed bibliographic instruction, online searching, faculty liaison, and other practices that highlight the expertise of librarians" (1986 :



67). If such a service operates successfully, then in all probability the enquirer will return to the library for subsequent information (Stuart, 1974 : 19).

The reference function found in most university libraries is largely non-existent in departmental libraries and this is yet another problem which a decentralized collection causes (cf 2.2.2). Very few of such libraries have professional or even para-professional staff to provide a reference service to their users (Benaway & Stanford, 1977 : 191), and undergraduates using such libraries are therefore denied the help and advice they require.

#### 4.5.6.1 Student Awareness of Reference Service

What are the limitations to reference service? Ignorance of the library's services and of the value of the information stored within it, is a major factor limiting library use by undergraduates. It is Wilkinson's belief that reference services are reaching very few students and that "those who are reached sometimes receive poor and indifferent service" (1971 : 1571). In a British study conducted over 20 years ago, Moss also noted a reluctance on the part of students to approach staff at the reference service section which "made for an almost non-existent reference service" (1966 : 111). In an earlier British survey in 1962, Line found that 39 per cent of undergraduates were disinclined to put queries to library staff (cited in Grogan, 1979 : 16).

Various other studies have over the years explored the nonuse of academic library reference services. Evrard and Wadington surveyed undergraduate students at Brown University in the early 1970s reporting that "32 per cent [of the students] had never availed themselves" of the reference service (1971 :354). In 1973 Nelson determined that academic staff at six California colleges were barely aware of half the services available in the library (1973 : 273 - 74), while in 1975 Sandock gained the impression in her survey at the University of Chicago "that some students are totally unaware of the existence of such a [reference] department" (1977 : 284). Sandock cites the three most frequently given reasons for avoiding the reference service as:

- a. 'dissatisfaction with past service';
- b. 'a feeling that the question was 'too simple' for the librarian'; and
- c. 'a feeling that they should not 'bother' the librarian' (1977 : 285).

A more recent American study by Durfee in 1982 using Sandock's procedure, found that overall student awareness of reference services was relatively high (90 per cent). Yet Durfee also indicates, that "for every service but one, undergraduates' desire for a service was higher than their awareness of it"(1986 : 287). The services which students considered the most important were "assistance in finding source materials - books, journal articles, government documents ... and in designing a search strategy" (1986 : 297). Other important aspects mentioned by students were help with the library computer, the catalogue, reference tools, inter-library loan, or a pass to another library (Durfee, 1986 : 297 -8).

Durrance's study of users at three university libraries in the American Midwest in 1984, examined the perceptions that library users have of the reference librarian as an 'information intermediary' and "the effect these perceptions have on their behavior both as library users and as clients" (1986 : 56). The effect of the reference environment on the user and the ability for users to distinguish between librarians and other library staff is also queried by Durrance. His findings reveal that library users:

- a. 'do not easily distinguish between librarians and other staff members';
- b. 'have only a vague notion of staff differentiation';
- c. 'are unaware of the credentials of librarians'; and
- d. 'environmental clues or other circumstantial evidence are used to identify staff by category' (Durrance, 1986 : 65).

The reasons why users may respond inappropriately include misunderstandings of the librarian's role, the assumption that all staff have the same credentials and provide the same levels of service, invalid criteria about whom to consult for assistance, or thinking of staff as mere custodians of material. Similarly, confusion for library users - particularly amongst students - occurs with the presence of anonymous staff members behind the reference desk, and with "the limited knowledge that library users have of staff differentiation in libraries" (Durrance, 1986 : 65 -6).

Dunn investigated the psychological needs causing undergraduates to seek information and (at the La Sierra Campus of Loma Linda University in the United States), statistically significant

relationships connecting these needs with categories of sources. She states that these "needs-sources relationships suggest we should continue our efforts to make the library user friendly. Bibliographic instruction, reference service (along with friendly smiles and a supportive attitude), suggestion boxes, etc. really do help establish our friendship with students as well as our competence as professional information providers" (1986 : 480). Dunn also concluded that librarians do not have the same level of exposure to students as academic staff, nor do they participate as frequently in student activities. Therefore lecturers, who have such broad exposure to students are considered by students to be the most important source of information and not the library (Dunn, 1986 : 485).

The greatest problem that reference service staff still face is alerting students to their services before such students actually leave the university. Stuart insists that:

... at the moment we are only at the stage where the majority of students are leaving university without knowing where to find information in their subjects and without even knowing that libraries are able to play an active part in helping them to find the information (1974 : 19).

This perception of uninformed students would tie in well with what Smith calls the "naive end users [who] continue to parade through our turnstiles" (1986 : 486).

Bailey suggests the formation of a three-way partnership between the lecturer, librarian and student in a 'library thesis practicum programme' as an answer to making the student aware of the

services available in a university library and the librarian's role as a key element in research (1985 : 79 - 81). Another suggestion in a similar vein is put forward by Stuart, who suggests that "undergraduates when writing ... long essays meet information problems ... and the library should be prepared to spend a fair amount of time in helping to resolve them" (1974 : 19). The danger Stuart cautions, is that librarians will do 'too much' and students will still leave the library without knowing how to find the information on the topic.

It would appear that publicity too may be another measure libraries can take to increase student awareness of a library's reference service (Evrard & Waddington, 1971 : 354). In addition, reference service areas should be "easy to find, with large identifying signs ... which can be easily read from a distance" (Dale, 1977 : 83).

Finding the right staff for reference service areas (cf 4.4) is another probable solution to the problem if present staff fail to strike a rapport with students, possibly even alienating them. Perhaps Biggs' contentious article on "Replacing the fast fact drop-in with gourmet information" gives a clue to the type of library staff who should staff such a service area, as being "only those strongest in personal presentation, question negotiation skills, and reference knowledge" (1985 : 69).

As reference service has many "built in handicaps" (Kennedy 1970 : 1453), to overcome these and also promote student awareness will require much skill, especially since Line has suggested that

there is a strong correlation between exposure to literature in the home and a student's use of the university library, and that the possibility exists that by the time a student arrives at university it is too late to alter his information-seeking behaviour (1973 : 100 - 117).

#### 4.5.6.2 Personal Assistance at the reference Desk.

Durey claims that the most depressing sight anyone can see in a library is an empty desk labelled "reference, or assistance to readers" (1973 : 327). Such a reference desk has great potential for providing directional information and for referring true reference inquiries to the professional librarian (Durrance, 1986 : 66), and has long been assumed to be the focal point of reference services (Swanson, 1984 : 19).

However, Ford proposes that librarians should " begin to think about alternatives to the reference desk as the center of reference service" in the light of new technologies (1986 : 494). She challenges the 'sacred library tradition' of the reference desk suggesting the replacement of the desk and librarian with a computer terminal (1986 : 491 - 4).

Librarians working at the reference desk are constantly being asked reference questions. Katz divides these questions into four types:

- a. 'directional';
- b. 'ready reference';
- c. 'specific search; and
- d. 'research' (1978 : 11 - 13).

Wilkinson's definition of reference questions is slightly elaborated and includes a time element:

- a. 'Information question: requires brief directional answer from [the] reference librarian who uses no library resources';
- b. 'Reference question: requires use of one or more library resources and less than thirty minutes in obtaining [an] answer';
- c. 'Search question: requires use of several library resources and over thirty minutes but less than one hour in obtaining [the] answer'; and
- d. 'Problem question: requires use of several library resources and more than one hour in obtaining [the] answer' (1970 : 9).

Much of the reference librarian's time is taken up with answering questions which fall into the first two categories Wilkinson identifies (Emdad & Rogers, 1978 : 451). The majority of questions brought to the reference desk are "brief questions requesting directions and other information" (Wilkinson, 1970 : 5). Bibliographic assistance with the library's catalogue also constituted the bulk of questions which Emdad and Rogers monitored (1978 : 451).

One of the most difficult aspects of reference work is determining exactly what the user really wants. In the reference interview, Olson believes that the questions "should be of the factual type" and each question posed "should be of the 'information escalator' type" (1984 : 327) to ensure the problem is understood. A most useful explanation on how to analyse questions is given in Grogan (1979 : 31 - 40).

The reference librarian assesses the information needs of the user and decides on which search method to follow. Whatever method the librarian decides to follow, it provides "rich opportunities for unobtrusive instruction" (Mews, 1970 : 10) in the use of the catalogue, reference tools, etc. This surreptitious teaching method will help readers to ultimately locate items themselves and any other information they need (Sandhu, 1975 : 10).

Wilkinson warns that library staff often give students very superficial and brief assistance, and unconsciously try and keep these requests to a minimum as "it is easy for staff to assume that questions will be generally relatively easy, uncomplicated and mostly repetitive in nature and this is in turn conveyed to students who consequently reciprocate by keeping their questions 'easy and unchallenging'" (1978 : 283).

Ideally, assistance to students is a one-to-one situation where the librarian can give him the full benefit of his attention and expertise, and attempt to understand what the student is trying to ask (Wilkinson, 1971 : 1571). It is also incumbent on the reference librarian to approach the student who appears to be in a quandary, since "there are the legions of students who ask reference questions, but whose questions disguise their real needs" (Kennedy, 1970 : 1453).

#### 4.5.7 User Education.

The traditional concept of the library as 'storehouse' has given



way to the prevailing view that it is "a dynamic instrument of education" (Gelfand, 1971 : 25). Inherent in this is the belief that teaching students to use the library and the value of library instruction, has almost become "an article of faith" (Mews, 1970 : 8; Whyte, 1977 : 293). The user's need for information became more demanding as changes to the curriculum and teaching methods exerted "a heavier influence on library use by students" (Lynch & Siebert, 1980 : 128). In 1935 Shores' new philosophy of education - in which it was proposed that the major function of the university was to educate the undergraduate and provide a learning environment for them - accentuated the library needs of undergraduates (1970 : 4). It was apparent that existing "forms of initiation to libraries and facilities ... were wanting in terms of intent, execution, and effect" (Roberts, 1977 : 468). Consequently the need for user education programmes emerged in the 1960s and enjoyed "especially strong growth in the 1970s" (Tucker, 1980 : 21), although according to Tucker, the origins of user education can be traced back to the 1870s (1980 : 12).

[ In the United States commitment to the importance and necessity of user education "became widespread and accepted" (Kirkendall, 1980 : 29) beginning as 'grassroots efforts' as several user education programmes were assembled by librarians "with whatever they had at hand" (Tucker, 1980 : 21). Some programmes owed their initial impetus to the influence of college or university presidents "who were determined to review and change the curriculum" (Lynch & Siebert, 1980 : 134). Other user education programmes drew their inspiration and ideas "from Knapp's

experimentation and research, first at Knox College and later at Monteith College, Wayne state University" (Tucker, 1980 : 22). In the study at Knox College, Knapp attempted to discover the direct contribution of the college library to the education of the college student (1959 : 1 - 2), whereas the Monteith College Library experiment was "the most detailed and painstaking attempt ... to study the relationship between the library and teaching" at a university (Levett, 1977 : 348).

The Monteith College library project was funded by the United States Government and directed by Patricia Knapp from 1959 to 1965. The experiment was based on the proposition that:

Traditional college instruction fails to exploit fully the library resources available for it and that the average college student's experiences with the library constitute a limited and fairly insignificant part of his education (Knapp, 1966 : 11).

The primary objective of the project was "to stimulate and guide students in developing sophisticated understanding of the library and increasing competence in its use" (Knapp, 1966 : 11). While on the surface it attempted to develop an elaborate reader education scheme what in actual fact occurred "was a two-year investigation into the potential of a symbiotic relationship between librarians and academic staff in the design, assembly and execution of a complete academic programme" (Levett, 1977 : 348).

The Monteith College experiment was the most thorough attempt to be undertaken on reader education by the end of the 1970s, even though only six out of the ten carefully designed projects were

able to be implemented before the two-year, four-man project ran out of financial support and academic staff support. The project's major contribution to user education was that it "reflected the philosophy that the library must be an integral part of the instructional program: (Lynch & Siebert, 1980 : 133). Many subsequent library instruction programmes drew their inspiration and ideas from Knapp's experimentation" (Tucker, 1980 : 20).

Despite the fact that user education "has almost the lowest priority in most library budgets" (Malley, 1978 : 21), it has grown rapidly in a very short time. Librarians in the United States were concerned about the rapid proliferation and duplication of user education material and in 1972 a project (initially funded by the Council for Library Resources) called LOEX (Library Orientation/instruction EXchange) was started to assist and aid those libraries and librarians who were interested in developing instructional programmes on their own campuses, and secondly, to act as a national clearinghouse for information and material on library instruction (Sharma, 1978 : 166; Stevenson, 1977 : 59). Laburn reports that in the United Kingdom and Australia similar clearinghouses to LOEX have been established which collect and loan sample user-education material "and there is talk of establishing such a clearing house in South Africa" (1984 : 94).

The world-wide interest in user education "can be seen from the fact that the literature contains descriptions of related courses in Australia, India, Nigeria, and Sierra Leone as well as in Europe ... where changes in traditional methods of teaching are

making user education more necessary" (Stevenson, 1977 : 60). Even in Scandinavia, user education is an active topic well documented by Fjällbrant (1973, 1974, 1975, 1976, 1978). Laburn considers user education to be a "neglected field in South Africa and the literature reveals little or nothing to be happening (1984 : 97).

Carlson and Miller conclude that "As a movement, it has [user education] roots and some history" (1984 : 483). The discipline of user education (or, bibliographic instruction as it is most commonly referred to in the literature) has recently reached maturity. Roberts has asserted that bibliographic instruction is a separate discipline in its own right (according to him, more advanced in this respect than library science) since it has its own theory of learning, its own taxonomy and its own particular reference tools (1982 : 160). There are many librarians who would disagree with Robert's remark but who would nevertheless maintain that it is a sign of maturity when bibliographic instruction can be seriously discussed (1982 : 75 - 76). Despite the hectic and rapid growth which has characterized the past twenty five years of user education programmes, and the great interest shown in the literature of user education, "it is impossible to identify an approach or concept that clearly defines the movement" (Carlson & Miller, 1984 : 483).

#### 4.5.7.1 Defining User Education

The term 'user education' has "many more names than it has definitions. Terms such as user guidance, user training, library

instruction, library orientation, library-use instruction, reader education, and bibliographic instruction have all been used to describe the activity of familiarizing the user with the library and its resources. Some terms, such as library/user orientation are aspects of the generic, user education" (Laburn, 1983 : 93).

User education has been defined by Malley as:

... a process whereby the library user is first made aware of the extent and number of library's resources, of its services and of the information sources available to him or her, and secondly taught how to use these resources, services and sources (1978 : 365).

User education is distinguished quite usefully from its near synonyms by Line who has pointed out that in its common usage it "implies a teaching process", whereas he prefers "to think in terms of learning process, (i.e.) the development by individuals of information handling skills" (1974 : 1). The term 'library instruction' (educating the library user) is not to be confused with 'library education' (training the prospective librarian) although both "developed simultaneously" (Tucker, 1980 : 13). Further classification on the terminology is proved by Veit who states:

\* The terms library orientation and library instruction are sometimes used synonymously to include all efforts to acquaint a student with the library, its resources, and their utilization. But usually library orientation is understood as the activity designed to familiarize the library user with the physical plant - with the location of facilities and resources. Library instruction involves the conveying of more detailed information on resources, as well as their proper and efficient utilization" (1975 : 136).

#### 4.5.7.2 Goals and Objectives of User Education.

Before planning a user education programme it is necessary to define the goals and objectives of the courses to be given (Fjällbrant & Stevenson, 1978 : 17). Such goals and objectives should be in agreement with the goals of the university of which they are part (Breivik, 1984 : 21; Fjällbrant, 1977 : 201; Laburn, 1984 : 94; Lynch & Siebert, 1980 : 127) (cf 2.1.1.2).

While the aims of the user education programme should tie in with those of the library and the institution, Stevenson points out that "the objectives for the courses should relate to the objectives of the individual department's courses, ideally they should be an integral part of those objectives" (1977 : 68). In an account of user education at Macquarrie University in Australia the aims are listed as:

- a. 'To educate students to use the ... library system- and any library system - efficiently';
- b. 'To assist students to develop effective information and literature searching techniques that can be applied to any subject';
- c. 'To assist students to gain some appreciation of the structure and use of their specialist literature and its relationship to the total communication and information network of a subject';
- d. 'To give students sufficient practice in using the literature so that they can continue to use it as a research tool - to keep up to date or to solve day-to-day problems' (Ludwig, 1972 quoted in White, 1977 : 288).

At Sangamon State University "the primary instructional goal of the library became the commitment to reach library literacy and ~~the~~ the independent use of the library", while library competence

became the "valid objective of liberal education" with the library having the responsibility to teach this competency (Dillon, 1975 : 4). The aim is essentially to teach the user "a variety of techniques and principles related to the retrieval and organisation of information" (Malley, 1978 : 22). Thus, having "established the goals and objectives the next stage in the planning process is to identify the target groups" (Laburn, 1984 : 94).

#### 4.5.7.3 Target Population

In the context of the university library the target groups the user education would be concentrated on students, staff and 'external' borrowers. Laburn identifies various "sub-groups within these groups - undergraduate and postgraduate students- each group is distinct, with distinct needs, and their institutional commitments determine the priorities which will be imposed on the user-education programme" (1984 : 94).

✕ Inevitably the emphasis in a university library will be on the student. As Trehan states "it is agreed that students need training in the use of books and the library" (1969 : 143). The need to primarily help the student is repeated constantly throughout the literature (Harrop, 1981 : 2; Perry, 1956 : 20; UGC, 1964 : 8; Vuturo, 1977 : 736).

#### 4.5.7.4 User Education Needs of Students.

To the uninitiated a university library is a complicated

organization and many student users are reluctant to admit their ignorance. Mellon reports that students feel the "lack of competence was somehow shameful and must be kept hidden, and that asking questions would lead to a revelation of their incompetence (1986 : 163).

Crossley has identified two main reasons why students need user instruction:

- a. 'Lack of adequate pre-university training'; and
- b. 'Problems of size and complexity of academic collections' (1980 : 2).

New students usually arrive at university with a great diversity of library skills, and regardless of how well laid out a library may be there is inevitably a technique to be learned for using it (Benge, 1979; Ekpe, 1979; Oni-Orisona, 1972; Wallenius, 1971).

X The educational background of students determines their ability to use a university library. A student who comes from an educational system where the teacher is sometimes the only source of information because "textbooks are either unavailable, difficult to find or too expensive is destined to experience considerably more problems adjusting to a university library (Greenfield, Johnston & Williams, 1986 : 229). Generally the undergraduate also finds "the sheer size of the collection and of the staff" of a university library intimidating (Hoadley, 1970 : 2). Students tend to prefer small collections and to be able to deal with one or two library staff whom they get to know, and who know them (Whyte, 1977 : 308).



At a recent workshop on bibliographic illiteracy organized by the Natal Branch of the South African Institute for Librarianship and Information Science (SAILIS), Switzer reports on the problems encountered with black university students in South Africa:

Many of these children are not equipped for University. The education system does not stimulate reading, or encourage the development of independent thinking. Students have few study skills and, for example, have difficulty in distinguishing between important and unimportant facts. A further complication is their inadequate English. Students lack the confidence to challenge authoritarian ideas and systems, unless in large groups. These problems cause lecturers to spend valuable lecturing time on remedial work that should be sorted out at school level (Switzer, 1987 : 8).

Another speaker at the same workshop comments as follows:

Black undergraduates at a white university are greatly disadvantaged by their schooling, as they have never been taught to think critically or analyse (Radebe, 1987 : 9).

The problems aired above highlight the responsibility of the South African university library towards the user education of black undergraduates. Just as American university libraries' have found with foreign students who lack independent research skills (Ball & Mahony, 1987 : 161), so too must university libraries in South Africa define the library setting, let students know what services are available and teach them how to use the basic research tools. In addition, the librarian must take cognizance of the linguistic insecurities which students have.

While there is no doubt that student user education needs should

be tailored to meet their requirements, increasing cognizance must be taken of the fact that all students arriving at university today require far more assistance than students of two or more decades ago. There is also the more obvious factor relating to "the different approach needed for first year undergraduates to that of postgraduates" (Rhodes & Evans, 1977 : 16).

It is essential that user education to students is tailored to meet their needs and that it is made "relevant and meaningful to the student" (Paterson, 1978 : 226), because the impact the library makes on a student during such library instruction can influence the student's future contact with the library (Stevenson, 1977 : 62). So librarians need to establish before library instruction begins, factors such as sex, age, 'class level' of the student which may influence the type of teaching or learning strategy to be adopted (Paterson, 1978 : 226).

#### 4.5.7.5 Instructional Objectives.

The user education programme's success depends on it being well thought out and based on actual need and clear instructional objectives being drawn up (Laburn, 1984 : 95). This is vitally necessary, as instruction can often be "monotonous, repetitive, superficial, more exuberant than reasoned, cliché-ridden, and based on naïve assumptions" (Kirkendall, 1980 : 34). The basic instructional objective must be that every undergraduate should be able to make effective use of library resources by the time he or she completes the undergraduate education (Dyson, 1975 : 13). Woelflin claims that the major instructional objectives of the

university library are more practical being designed "to make sure that everyone knows where such things as periodical indexes and various catalogues are found ... [and] how to check out books and use such equipment as microfilm readers and reproduction devices" (1972 : 41).

The user education programme should provide students with competency in the following:

- a. 'Knowledge of the basic kinds of print and non-print materials available and how they are arranged';
- b. 'Knowledge of basic bibliographic tools and how to use them';
- c. 'Knowledge of specific bibliographical tools in a particular area of interest and how to use them';
- d. 'Knowledge of other subject areas related to the primary area of interest and how to find reference to them'; and
- e. 'Ability to define a problem within a particular area of interest to limit and select materials most relevant to it' (Dillon, 1975 : 4).

The ultimate objective being to develop in the student a bibliographic skill which would enable him "to locate, sift and assess critically" information, and "a respect for authorities and an awareness of the dangers of intellectual piracy or plagiarism; hence the relevance of his understanding of the methods of proper bibliographical documentation" (Aguolu, 1983 : 2).

#### 4.5.7.6 Library Instructional Programme

A user education programme designed by a university library must be designed to suit its clientele. The method chosen "depends on

the users - their knowledge, their reason for wanting the information and their educational intentions, as well as their available free time" (Schmidmaier, 1977 : 29).

Wilson has identified two main forms of user training programmes. He considers these to comprise:

- a. 'introduction to the resources of a specific library, with instruction on how to gain access to these resources'; and
- b. 'introduction to the total bibliographical apparatus of a given subject field' (1977 : 25).

The argument corresponds to Malley's definition quoted in 4.5.7.1 that implicit in user education are two basic modes - orientation and course-related instruction. Woelflin also outlined a two-stage instructional programme which assumed that none of the students were familiar with the library. He suggests a first stage which "involves a presentation to large groups of students while the second stage consists of an introduction to self-helps which aid learners in using books, references, and collections in the library" (1972 : 41 - 42). Olaniyan, Arikenbi and Ugonna similarly suggest a two-tier programme for students (1975 : 124).

However, Laburn believes that user education should "preferably be divided into three modes - orientation, basic library skills, and course-related instruction "(1984 : 95). These three basic modes form the basis of this researcher's investigation into user education.

The challenge of library instruction to the librarian is to

ensure that whatever instruction method chosen, the undergraduate is introduced to the services offered by the library and exactly what they comprise, in such a way as to encourage his later use of the facility.

#### 4.5.7.6.1 Library Orientation

In university libraries which have orientation weeks, or days, the library usually tries to do something that will bring its services to the attention of the new students. By 'orientation' is normally meant a lecture and/or tour of the library which emphasizes the location of resources, various departments and the card catalogues, and is "basically a public-relations exercise" (Laburn, 1984 : 95). According to Aguolu the general format consists of:

... [an] address of the university librarian or his representative to new students; a guided tour of the university library in groups; distribution of attractively designed and concisely written library guides; handbooks; pamphlets or leaflets that give details of the layout of the library with particular attention to the card catalogue, classification system used, library regulations, loan policy, opening hours, resources and services of the library, other libraries on the campus, and the importance of the reference librarian" (1983 : 4).

Orientation can be seen then as an initial 'welcome' to the new user designed to make the student relaxed and comfortable about using the library in the future (Stevenson, 1977 : 62). There is a danger in library orientation that the librarian will try to convey too much information especially if the amount of prior knowledge of the students is over-estimated (Laburn, 1984 : 95).

The (brief and general) library orientation given to first year students usually takes places within the first few days of the students arrival at university, "forming part of a timetabled programme for new students" (Stevenson, 1977 : 55). The new student orientation week is a frantic time, prompting Kennedy to caution that "the optimal time for library instruction is within a week of the time that students start their first assignment because if the instruction is offered too early or too late, students tend to be indifferent to it" (1970 : 1452). Olaniyan, Arikenbi and Ugonna also agree that library orientation should take place at a later stage - during the second term as students were "too preoccupied with becoming acquainted with their instructors ... and making general adjustments to college life" (1975 : 129). Wilkinson suggests only a brief tour to introduce students to the library at the beginning of the first term, leaving bibliographical lectures to be integrated with courses at the exact time students have need of such assistance (1971 : 1570).

The manner in which library orientation programmes are offered varies from one library to another but according to Stevenson "it is apparent, however, that the smaller the institution or library, the more personalized the introduction becomes and the more effective it is thought to be" (1977 : 55). Individualized instruction became popular during the early 1960s (Adams, 1980 : 84) enabling the librarian to tailor the content of each lesson to a student's actual needs.

The reasons why some libraries have no orientation programme is

mostly due to staff shortages. Whyte believes that this constraint "may reflect a belief that this function is somehow less important than traditional and more obviously essential functions such as acquisitions cataloguing and circulation" (1977 : 527). There is often a lack of appreciation not only by the library but also by the whole university for library orientation. Funding, timetabling problems are also cited as reasons for not providing orientation. Students, similarly, are unwilling to surrender time, scheduled or otherwise, to an activity which has no seemingly tangible benefits. It is always difficult to communicate to students who are pressed for time that effective library use will make a substantial contribution to examination results. Whenever library orientation is given the librarian must be aware of the fact that since the time allotted is usually severely limited, every effort needs to be made to use this initial opportunity to generate further student interest (Hammond, 1975 : 86).

#### 4.5.7.6.1.1 Types of Library Orientation.

The need to train users is widely acknowledged, with different libraries offering a variety of methods to ensure that students are introduced to their facilities. These methods include some of the following:

- a. lecture
- b. film
- c. videotape
- d. tape/slide presentation
- e. guided tour
- f. audiotaped tour
- g. self-guided tour

The type of library orientation employed will depend on the objectives of the programme: "for example the objective of orientating great numbers of new students to a large library and its services suggests using a slide-tape presentation or a self-guided tour" (Kirk, Kennedy & van Zant, 1980 : 41). On some occasions library orientation will include a combination of several different types of approaches - such as a lecture incorporating a slide/tape presentation followed by a guided tour of the library. Whyte recommends that the 'traditional' talk on using the library by a librarian or member of the library staff may be replaced or supplemented by leaflets, filmstrips, films and videotapes (1977 : 286).

Many libraries are constantly experimenting with new ways of introducing the student to the library. Displays such as 'How to borrow a book' or 'How to use the Reserve Collection' may be mounted (Whyte, 1977 : 285 -6).

University libraries have for many years offered orientation tours for new students, but with the rising impact of audiovisual media libraries have increasingly begun to re-assess 'the library tour'. Librarians have questioned the purposefulness and effectiveness of these tours, asking themselves whether students are not actually put off the library instead, as such tours are known to be dull, while the librarians who give them, are seldom skillful teachers. Hence audio-visual technology has been acknowledged as a means of presenting alternative and more effective ways to introduce students to the library (Whyte, 1977 : 285).



The aims of all these different orientations are "simple and straightforward: to get all students into the library at least once during their first year; to create an initial contact between individual students and members of the library staff; and to instil the idea that the library is more than a warehouse of books and that it might be of value to them to learn more" (Rhodes & Evans, 1977 : 17).

#### 4.5.7.6.1.2 Lecture.

The orientation talk "should be short and to the point" (Hammond, 1975 : 87), as well as being "friendly and even humorous" (Aguolu, 1983 : 4). Mellon calls such a lecture a 'warmth seminar', because of the importance students place on 'getting to know the librarian'. She concedes that "in this session, our primary goal is to help students see the library as a great place with fascinating information and warm, friendly people available to help them" (1986 : 164 - 5).

It is important to note that the 'traditional' talk on using the library has come under fire from certain critics. Ford expresses concern that "The lecture, commonly given to freshman students at the beginning of their first session, must surely be a waste of time" (1973 : 96). Whyte too feels such lectures "seldom arouse great enthusiasm" (1977 : 285) but if held later in the student's career may well have some value when "real learning takes place, when students use the sources" (Kennedy, 1970 : 1452). The counter argument to suggestions to postpone the orientation talk, however, "is that many students might not even know that the

university library exists, how to get to it, or how to borrow anything from it. Consequently the general orientation lecture is essential at the very beginning of the academic session" (Aguolu, 1983 : 4).

The initial 'library lecture' is important in that it 'bridges the gap' and sets the tone for the university library's interaction with the undergraduate.

#### 4.5.7.6.1.3 Film.

Some orientation programmes use sound films (Burke, 1970 : 402) to introduce students to the services that the library offers. Durey believes that film is not a very satisfactory medium, as "routines change surprisingly quickly and it is too expensive and too time-consuming to be regularly making instruction films" (1973 : 322). A good film, although expensive, can be an excellent library guide especially if a librarian is available to answer questions after the screening.

#### 4.5.7.6.1.4 Videotape.

Modern versions of the lecture on videotape on the other hand can be most effective "as they can be made available to students on a more continuous and individual basis" (Ford, 1973 : 96). While television is quite a flexible medium "there is not an overabundance of librarians with the ability to direct or to take part in an instruction TV Programme on library use" (Durey, 1973 : 322).

Jacobson and Albright report that the use of videotapes proved most successful as students "can observe their peers going through the procedures they themselves should learn. Modeling behavior in this manner allows students to see how easy it is to use the library" (1983 : 271). They conclude that videotapes enhance the learning process and promote retention of what has been taught (1983 : 271).

#### 4.5.7.6.1.5 Tape/Slide Presentations.

Tape-recorded and slide lecture programmes have been used successfully at some university libraries. A programme of coloured slides linked with commentary covers the simple methods of using the library, such as its layout, how to borrow a book, and how to use the catalogue. Tape/slide presentations are "more flexible than filmstrips and can be produced locally at moderate cost" (Olaniyan, Arikenbi & Ugonna, 1975 : 131). They also offer "the most sensible means of providing individualized library instruction for students" (Vuturo, 1977 : 738).

The tape/slide presentation has dominated library user instruction since SCONUL (Standing Conference On National and University Libraries) formulated a plan for producing teaching packages for library user education in Britain in 1970 (Adams, 1977 : 100). The Travelling Workshops Experiment also made available "centrally-produced packages as the final stages of the British Library funded research project" started in July 1975. The packages "were essentially extensive displays of information sources" (Clark & Harris, 1978 : 279) but their drawback was that the

slides in the programmes could not be changed to reflect local conditions. Durey contends that tape/slide programmes must be 'created locally' to have any real benefits for the students to whom they are presented (1973 : 323). The use of videotapes and tape/slide programmes offer "several distinct advantages when teaching orientation" (Woelflin, 1972 : 42) especially as they can be shown to students who miss the orientation class. For example, the tape/slide programme may be set up near the information desk in the first few weeks of term.

Vuturo believes that library staff must be responsible for producing these programmes to ensure their effectiveness (1977 : 738), and while a lot of thought may go into the decision as to which audio-visual medium is the most effective in library orientation "there is no research evidence that one is a better medium than another" (Malley, 1978 : 25).

#### 4.5.7.6.1.6 Guided Tour.

The orientation tour has long been a prominent feature of most libraries' orientation programme although Stevenson reported 11 years ago that "tours are no longer considered essential and are omitted by several libraries" (1976 : 18). Tour groups are often too large and "are not all that motivating" (Laburn, 1984 : 95). "Inevitably these groups contain people with varying degrees of library experience and interest with the result that some are bored while others are frustrated" (Dash, 1977 : 33). Stevenson considers that the only reason that libraries give orientation tours is "to make up for the inadequate guiding or signposting

they provide" (1977 : 64). The problem that tours of this nature "disturb other users of the library" (Laburn, 1984 : 95) could be resolved by "scheduling tours during 'off peak times'" (Dash, 1977 : 33). Guided tours should be given to groups small enough to enable students (or other users) to hear what is being said. They should also be conducted by librarians "who can realistically assess what can be absorbed in only 40 minutes or so" (Mews, 1970 : 9).

Libraries may control the number of students at each library tour by issuing tickets. In a study conducted at the University of Adelaide library, Whyte found that because a ticket is needed, attendance at the tours "has gone up since the old days when students just turned up at a specified time without booking in advance" (1977 : 286). During the library tour, library staff may be stationed at the main entrance in order to answer queries. Not many libraries have abandoned the orientation tour altogether but few rely on it completely.

#### 4.5.7.6.1.7 Audiotaped Tour.

Orientation can be directed by an audiotaped walking tour. The cassette audio-tour is designed in such a manner that students may listen and actually see the various parts of the building as they walk around the library. According to Dash, the audiotape self-guided tour is "generally very well received" (1977 : 31).

As a medium of instruction it is "simple, relatively inexpensive, easy to revise and easy to produce" (Hall, 1977 : 31). In

addition, the student gains a familiarity with the layout of the library which the tape/slide programme cannot provide. On the other hand audiotaped tours may be incomprehensible or monotonous, and, if only one voice is used, could have a "soporific effect". Hall suggests that a solution to these problems would be "to incorporate an element of practical work". This would require the student/user to switch off the tape and do a specified task (Hall, 1977 : 30). Audiotaped tours nonetheless are known to appeal to students - to a generation which is orientated to sound and earphones" (Adams, 1980 : 87).

#### 4.5.7.6.1.8 Self-Guided Tour.

In the self-guided tour students are introduced to the principal service areas of the library - areas which they would use most during the year. It might take no longer than 10 minutes. The choice of medium allows students to look about the library with a text in their hands. The information in the text requires special consideration "as it should be restricted to the minimum a first year student should know" (Dash, 1977 : 34). The advantages of a self-guided tour are that it allows the student to proceed at his own pace and can easily be updated whenever changes in layout necessitate this.

#### 4.5.7.6.2 Guides to the Library.

The conviction that all users of the university library should learn how to utilize it effectively has often led to publicity campaigns aimed at bringing the library to the notice of its

potential users. Such campaigns are designed to ensure that those who need help in making the best use of the library's collections do in fact get it. Some university libraries would probably express the need to be still experimenting with ways of publicizing its services and of promoting their use, while others might claim that the best way to teach a user to use a library is by direct discussion between that user and a key member of the reader services library staff - such as the reference librarian (Whyte 1977 : 286). Nevertheless, guides to the library still constitute one of the most common orientation tools, library teaching aids and vehicles for library publicity (Hinton, 1954 : 60).

Copies of the library guide may be distributed at the time of the library tour or at sessions when the television or audio-visual programme on the library is screened. In order to be most effective library guides "must be distributed outside the library" according to Dale (1977 : 82).

Guides to the library must be written with the users needs in mind and "not from the outlook of the trained librarian who has lost sight of the ends in his preoccupation with the means" (Mews, 1970 : 9). Although librarians are always eager to produce library guides Ford warns that "the results too often resemble textbooks of librarianship" (Ford, 1973 : 96).

In practice, library guides differ considerably in format and content, and reflect "to some degree the different attitudes of librarians to their usefulness" (Stevenson, 1977 : 56). Some-

times these guides are much too long: as Adams states "they tend to overwhelm the user with more information than is needed (or can be absorbed) at a first introduction" (1980 : 86). If guides are dull, complicated, unattractive or contain "rigidly academic advice" this may cause students not to use them (Stoica, 1977 : 335).

A practical suggestion put forward by Sayles in relation to library guides is worth considering. Sayles believes that lecturers' course outlines and syllabi should be analyzed and that the information thus gleaned, should be used in the creation of study guides and other library instruction publications. Sayles states:

Since a library guide and its secondary applications derive naturally from course information, students should benefit from the symbolic relationship between instructor and librarian (1984 : 345).

The advantage of library guides is that they allow the student to have control in selecting which information (and how much information) is needed, and to work at his own pace. As the guides are 'library-produced' they have the advantage of being geared to local conditions (Adams, 1976 : 105).

Written guides to the library are probably amongst the most basic library orientation teaching tools. They have value for students and save time in the long run for librarians in so far as they reduce the need for having to respond to repetitive routine questions. Koppelman maintains that it is the newcomer to the campus who probably benefits most from a written guide to the



library that "can be used in conjunction with other orientation techniques as a handy reminder or can be distributed to students as needed" (1976 : 256).

Guides to the library for users also take the form of 'good signage' which "is essential for efficient library orientation with a minimum of personnel" (Rader, 1980 : 99). The use of clearly readable signs which are readily understood by undergraduates is necessary in a university library, although Durey contends that attempts to guide the collections of libraries too often look like the work of amateurs, and he concludes that "It is doubtful whether a single university library has given the same detailed thought to the labelling of its components as, for example, air terminals or supermarkets have been compelled to do" (1973 : 321).

Signs must be positioned "so that they are easily locatable from the entrances and major traffic routes but also that users will not feel self-conscious about pausing" (Stevenson, 1977 : 64). Signs such as 'Did you Find Your Book?' can direct students "to follow one procedure if they did and another procedure if they did not" (Dale, 1977 : 83).

Other visual aids are floor plans which can be displayed in the library and distributed to students are also useful guides to the library. The preparation of these and all user guides "qualifies as another teaching function" (Rader, 1980 : 100) and a means of ensuring that the student gains easy familiarity with the university library.

#### 4.5.7.6.3 Basic Library Skills.

Library skills are an essential component in any discipline since 'user education' and 'library instruction' are part of the notion of teaching the student how to find the information in the library of the university of which he is a student. Library staff are supplying him on the one hand with a tool to use in acquiring his qualifications, and on the other equipping him with the knowledge and skills to use when he leaves the university or continues with further study. What then does a basic library skills course constitute? It is "a compromise between orientation and course-related instruction" (Laburn, 1984 : 95).

It is one thing to get the student into the library - it is quite another to teach him the basic skills to use it. Library skills are needed by students "if they are to benefit from the material housed in the library" (Herring 1978 : 16). Locational skills, would be those skills needed to use the catalogue to find the appropriate call number and then to locate the material on the shelves (Herring, 1978 : 17). However, undergraduates see little value in obtaining these skills, and for library staff it can be most frustrating to teach disinterested students (Tassia, 1979 : 105).

Dash maintains that the ideal library skills learning process should be stimulated by an exercise set by the student's teaching department "so that library skills are perceived as obviously useful and relevant. Close cooperation of this kind with teaching staff is certainly a very worthwhile long-term aim"

(1977 : 38). Meanwhile Whyte reports that at the University of Sydney Library professional staff give talks on the use of the library to first year students in several of the major disciplines. The origin of these talks began "as introductions to the library ... but they are becoming more sophisticated and oriented towards the subject field" (1977 : 286).

The need to teach library skills "in a systematic user oriented manner" (Herring, 1978 : 16) has given rise to the introduction of workbooks. Some instruction programmes - based on the introductory orientation course - give library assignments within their specific courses (Burke, 1970 : 402). Librarians have begun to recognize that "students learn by doing, not by being told. Library and information use is being recognized as a practical skill that is acquired through practice, not by being taught" (Stevenson, 1977 : 57). Indeed there is now "strong and convincing library or institutional arguments in favour of this kind of self-paced instruction" (Jewel, 1982 : 371).

The use of workbooks is an inexpensive way of teaching large groups of students in a structured manner, but this method does allow for differences in level of student ability (Adams, 1980 : 89). Examples of such self-paged workbooks are those developed at the University of California (Los Angeles), Bowling Green State University, and Pennsylvania State University (Jewel, 1982 : 372); the UNISIST guide (Clarke, 1978 : 368); the pathfinders developed by Project INTREX at the Massachusetts Institute of Technology (Adams, 1980 : 87); and the workbook/exercise module offered at Slippery Rock University (Wood, 1984 : 278 - 84).

Workbooks are generally divided into chapters dealing with different library resources. Students are required to answer questions or complete exercises. Exercises can serve both as a guide to students in their own independent searches and as a means of providing feedback to librarians (Kirk, Kennedy & Van Zant, 1980 : 42). According to Sloan, undergraduates " can find library skills valuable in initiating their first timid efforts at 'research' ... [and] can be for students a significant educational experience, even a revelation" (1984 : 106).

Skills-oriented courses based on workbooks can improve student motivation and result in "a positive, significant increase of library skills and improved attitude toward the library" (Wood, 1984 : 282). In Renford's opinion the self-paced workbook the foundation "for future bibliographic instruction" and if successfully received such "advanced modules become very attractive" to students (1978 : 203).

#### 4.5.7.6.4 Course-Related Instruction.

The third 'mode' of user instruction in a university library is course-related instruction (cf 2.5.7.6). Course-related instruction according to Renford and Hendrickson "usually involves a single lecture given by the librarian. The instruction centers on the specific needs of the students in a particular class" (1980 : 185).

This involves instruction in library skills and bibliographic information, while course-integrated instruction, (a related

concept) has been defined as "the objectives of a non-library course include library instruction as an essential part of the course. Its importance is often demonstrated by its inclusion in the course of study for the class" (Renford & Hendrickson, 1980 : 184).

Course-integrated instruction implies a much closer relationship between course objectives and the library component, the librarian often liaising with the lecturer in the planning stages of the course (Renford & Hendrickson, 1980 : 72). According to Carlson and Miller course-related and course-integrated instruction share three common characteristics, viz:

- a. 'integration with the curriculum';
- b. 'academic staff involvement'; and
- c. 'group instruction' (1984 : 482).

Course-related programmes differ widely from the other modes of library instruction viz. library orientation and basic library skills (cf. 4.5.7.6.1 and 4.5.7.6.2) because of the programme's integrated approach. Carlson and Miller suggest that these differences often relate to the "extent of the interaction between librarian and faculty member" (1984 : 484).

The advantages of course-related instruction have been identified in the following:

- a. 'it is the kind of activity which can begin at grass-roots level and then develop to suit the institutions requirements';
- b. 'it is an excellent means of improving library and academic staff relations';

- c. 'it is flexible';
- d. 'it can reach large numbers of students at one time'; and
- e. 'it has the ability to meet student needs at an appropriate time' (Renford & Hendrickson, 1980 : 73-76).

The librarian plays a vital role in the integrated approach (Michalak, 1976 : 259). Not only does the librarian become more actively involved as a "participant, teacher and information specialist", but by moving out of the library into the lecture-room to teach students "enables the librarian to take such an active and effective part in the educational role of the institution" (Carlson & Miller, 1984 : 484). Eisenbach believes that the benefits to the librarian by participating in such instruction is most beneficial and that "librarians become better librarians" as a result (1978 : 318).

The most critical disadvantages of course-related instruction are summed up by Carlson and Miller as:

- a. 'cost in time and personnel in preparing for lectures considering the librarian's other day-today responsibilities';
- b. 'coordination and scheduling - the instruction is dependent on integration with the curriculum so the librarian must work within the time constraints imposed by the lecture. The coordination of two or three lectures a day during the first few weeks of term can be a formidable administrative problem'; and
- c. 'the development of course material require time to organize and maintain. Some can be costly to duplicate and need to be redesigned with each new lecture' (1984 : 485).

Rogerss states that "time is a particular constraint in course-

related instruction" (1980 : 71). This is because instruction is usually initiated at the invitation of an academic member of staff, the librarian typically being granted only one lecture period in which to speak to students. In addition to the listing of disadvantages above, Carlson and Miller have also identified three areas over which the librarian has less control and which are 'considerably troublesome' :

- a. 'a critical dependence, on academic staff';
- b. 'the difficulty of achieving a balanced programme of instruction'; and
- c. 'the problems of transference of library-based knowledge from one course to another' (1984 : 485-6).

Librarians are very dependent on the cooperation and support of academic staff in regard to course-related instruction (cf 4.6). Problems with course-related instruction arise when students see that their lecturer is fully committed to the instructional programme and when library assignments have not been well chosen (Sloan, 1984 : 486 - 7). Indeed, Penney states that "The lecturer's confidence in the library staff lends to be passed on to students, a factor which Patricia Knapp found to be vital to the success of instruction programmes at Monteith College ..." (1975 : 137). Academic staff play a crucial role in guiding, judging the results and deciding whether or not to continue with course-related instruction in the future (Stoan, 1984 : 106).

Course-related instruction is usually given to a clearly defined target population. Librarians can tailor the course to meet the appropriate academic level of the students. The wide diversity

of library skills amongst students presents a problem, but it is not quite as problematic for course-related instruction as it is for library orientation. The situation is compounded by the fact that almost all students, regardless of their actual level of bibliographic skills tend to regard their library skills as being quite good - believing themselves to be competent library users (Carlson & Miller, 1984 : 487).

The instruction is helpful if it is designed "to help the student complete a documented paper" (Keever & Raymond, 1976 : 185). If the course can be related to solving practical problems, (especially of a topical nature) the information contained in it may seem (more relevant) to the student (Veit, 1975 : 136). This is where course-integrated instruction can contribute effectively. The Earlham 'bibliographic approach' - a prototype developed at Earlham College - required the collaboration of the lecturer and the librarian to develop a workbook of exercises which simultaneously engage the student in progressively more sophisticated use of the library while proceeding through the course syllabus. The successful completion of the course required the completion of the workbook assignments. The workbooks were designed specifically for a particular discipline and academic levels of that discipline (Morton, 1979 : 162).

A lack of bibliographic awareness is fairly common among undergraduates. Bibliographic awareness must be part of a scholar's intellectual equipment (Borchardt, 1977 : 162), and Carlson and Miller report there to be a greater emphasis in bibliographic instruction literature on teaching students a



conceptual framework (1984 : 488). Frick calls for an attempt to teach:

- a. 'discrimination or judgement'; and
- b. 'an understanding of bibliographic structure' (1982 : 197).

Frick believes that the way students obtain material may be more important than the material itself (1982 : 205). She suggests four levels of bibliographic awareness

- a. 'specific titles useful for certain tasks';
- b. 'types of sources';
- c. 'knowledge of disciplines and the need for the use of different sources'; and
- d. 'knowledge of the structure of literature' (Frick, 1982 : 198).

Carlson and Miller conclude, that in the teaching of bibliographic awareness it is crucial that students are taught how to learn "if bibliographic instruction is to be more than first aid for a specific assignment" (1984 : 488).

Course-related instruction is a vital component in the user education programme - its major advantage being that it lends itself to providing the help students need at the time they need it most (Kirk, Kennedy & Van Zant, 1980 : 43). While programmes of this kind will require an increasingly sophisticated approach on the part of the librarian, the library's "annual investment in reader education ought to be at least equal to that of technical services, or collection building, otherwise the collections

merely become congregations of unchartered anarchies, each understood only by a small band of cognoscenti" (Levett, 1977 : 367-8). The fundamental purpose of course-related instruction (and indeed of all user education) must be kept "clearly in focus: to support the educational program of the parent institution" (Kirk, Kennedy, Van Zant, 1980 : 51).

#### 4.5.7.7 Aids to Instruction.

One way of livening library instruction is to use audio, visual and audio-visual aids. Slides and overhead projector transparencies are especially useful. They allow a lecturer to simultaneously show a specimen catalogue card or sample page of a reference tool to a class who may have the printed text in front of them. Specially designed games may also aid the librarian to teach library skills to uninterested students. Tassia outlines basic steps to games construction and a sample game in an article entitled "Its not just a game" (1979 : 105 - 107). Despite all these and other aids such as training films and video programmes, educational technology is changing so rapidly that the computer is destined to be the key 'instructional device'" (Lawrence, 1980 : 139 - 152).

Irrespective of the type of aids employed to teach library instruction, Woelflin maintains that "materials must be of such a quality that students will take time to look at, listen to, and learn from their content. No matter how good these aids are from the standpoint of librarians, audio-visual specialists, and communication experts, they will be of little use unless accepted

by the students" (1972 : 40). Lawrence reports that at Ohio State Library computer terminals "generated a seemingly endless stream of detailed and frequently tedious questions on nothing more substantive than the hardware, e.g. how to clear the screen" (1980 : 144). It is thus imperative that the freedom offered by automation strikes the right cord with such students and does not further alienate them from active library use. Herring also points out that if a student who wants to extract information from the software "lacks the technical skills to operate the hardware then he/she may become disillusioned with the whole process of seeking information in an audiovisual form" (1978 : 18).

As microcomputers and their software increasingly feature as indispensable equipment and material in university libraries, the greater the need for instruction in computer literacy. It has been suggested that librarians should understand that "it is their role to teach computer skill ... [even if] it sounds too much like teaching computer science" (Piele, Pryor & Tuckett, 1986 : 375). Students enjoy the interaction with the terminal and need little assistance "moving at his or her own rate, but also receiving more or less instruction according to need" (Adams, 1980 : 90). Librarians need to become "technologically adept professionals with expertise in the latest technology ... [to] play a significant role in promoting computer literacy on their campuses" (Piele, Pryor & Tuckett, 1986 : 377).

The benefits of computer-aided instruction (CAI) provide both a challenge and opportunity to librarians to harness its potential

for user education programmes (Laburn, 1984 : 96). The contribution which CAI can make to library instruction - especially its creative applications via a system such as the PLATO (i.e. contribution) (developed at the University of Illinois) - carries its own motivation (Williams & Davis, 1979: 14 - 19)

The computer is in Lawrence's opinion, the "ultimate instructional device" for library user education because it is glamorous, portable, responsive and is very acceptable to post-graduate students and academic staff (1980 : 149). Just as academic staff are facing up to the necessity of "integrating microcomputers into the curricula of their specific disciplines; librarians should do the same with bibliographic instruction" (Piele, Pryor & Tuckett, 1986 : 377).

#### 4.5.7.8 The Librarian's Role as Teacher

According to Wilkinson the essence of reference services to undergraduate students resides in the single concept of the role of the librarian as 'teacher' (1970 : 4). However there are many reference librarians who tend to conceive of their duty to students as their role at the reference desk, and who "recognize no obligation to help students understand the library or to use its full potential" (Leonard, 1982 : 96). While librarians complain that instruction 'detracts' from the reference function, Kennedy argues convincing that instruction "reaches some students who never ask for help ... [and] experience has shown that students receiving library instruction are more rather than less, willing to ask for reference assistance. They know the reference

staff and know its members are interested in their problems" (1970 : 1453).

In the last two decades, librarians have begun to realise that their role as the traditional collector of information has been supplemented by an additional "active teaching role" (Bagley, 1974 : 38 - 39). This need for librarians to teach has paralleled the growth of collections and the fact that "Students at the undergraduate level [have begun] sinking into a sea of bibliographic plenty" (Vuturo, 1977 : 736). In this regard the ACRL Bibliographic Instruction Task Force in its Guidelines for Bibliographic instruction in academic libraries, has asserted that "it is the responsibility of an academic library not only to support the teaching function of its parent institution, but also to actively participate in that function" (1977 : 75). The 1979 ALA Standards for university libraries in its turn endorsed the concept of library instruction in the commentary on standard A.1, where it is stated that "A university library should provide ... specialized and in-depth assistance to individuals in the use of the library's resources" (1979 : 102).

If librarians are to abide by these guidelines and instructional standards they will have to "get themselves into the classroom where they belong" (Vuturo, 1977 : 736). The problem in most university libraries is that there is a reluctance to commit a significant number of librarians to teaching (Kirk, 1974 : 88). In order to rectify the situation, the recruitment of the right staff is essential. Hogan believes that this problem can be overcome by the concentrated efforts of library educators " to

provide training in the techniques and methodology necessary for library instruction" (1980 : 120). This view is supported by Stevenson who states that "there is a strong feeling amongst those doing the teaching that library school did not prepare them for their task" (1976 : 19). Likewise Vuturo sees "the first order of business would seem to be the recruitment of library science students who exhibit a sincere affinity for teaching" and believes that "library schools must encourage the successful teacher to return for advanced bibliographic training" (1977 : 739). Just as libraries' primary function has evolved from technical services to public services', Vuturo maintains library schools must similarly evolve - by attracting students who will have the talent and potential to teach bibliographic instruction (1977 : 739). In undertaking library instruction, librarians may be "assuming a role not only for which they have no professional training ... but, more importantly one that many of them deliberately decided should not be their life's work, since their gifts do not lie in that direction" (Mews, 1970 : 8). Implicit in Mew's argument is the attitude of librarians to teaching which "varies from enthusiasm to mild antagonism" (News, 1970 : 9). Typical criticism from academic staff of librarians as teachers is that they "are not good teachers: therefore they should not try to teach" (Sharma, 1978 : 168). Stevenson also alleges that "one of the greatest problems user education faces [is that] librarians are not skilled educators" (1976 : 18).

In Meltzer's opinion librarians can be taught to teach, and can acquire the qualities to be competent, confident, well-trained and enthusiastic teachers (1982 : 36). Inevitably, job descrip-

tions which mention 'instructional abilities' are a feature of those libraries which actively promote instruction (Tucker, 1980 : 22). As in the beginning, librarians may volunteer to do the instructional teaching, they are understandably not always eager to continue with it indefinitely (Mews, 1970 : 8).

Librarians who feel uncomfortable in the classroom situation and are often "reluctant to overcome their weaknesses and failures" should rather "not become reference librarians" (Sharma, 1982 : 97).

Even if library staff are willing to participate in instruction, academic staff do not necessarily accept them as their peers or colleagues. Academic status is not easily granted, and if librarians wish to be fully "accepted as bona fide members of the teaching staff they will have to fully accept teaching responsibilities" (Vuturo, 1977 : 740). Peele disagrees with the granting of faculty status to librarians who claim they are teachers when this is only what "a part of the professional staff do a part of the time" (1984 : 270). On the other hand it is difficult for the librarian to achieve equal status as an academic member of staff especially if "the teaching faculty ... is unwilling to treat the librarian as an intellectual equal" (Trehan, 1969 : 143).

Despite these expressions of disdain the literature reveals an increasing willingness on the part of librarians to assume responsibility for library instruction. However, it is important to ensure that instruction is taught by only those librarians

"who are competent teachers, and who can win the support of their students and the faculty" (Sharma, 1978 : 168). The support of the academic staff (and even the administrative staff) is essential if the function and status of the professional librarian is to change and if the librarian's role is to be viewed as an instructional one. In Vuturo's opinion "This concept can be sold and it needs to be if we are to serve the undergraduate's complex informational needs" (1977 : 74)). Those who can teach, must teach. Indeed, Marshall has predicted that by the end of this century librarians will have earned their place as full-fledged educators (1977 : 61).

#### 4.5.7.9 Liaison between Academic and Library Staff.

Lecturers are the key to the proper use of books in university libraries. Undergraduate use of books cannot be improved by lecturers who are unclear about the role of books. The crucial importance of the lecturer's role in encouraging student motivation has been mentioned earlier in this chapter (cf 4.3).

Mann has made the following comment:

It is funny how librarians seem so ready to take upon themselves the responsibility for failing to meet the information needs of the students. It is extraordinary how rarely in their writings one finds them criticising the lecturer for failing to do enough about the information needs of students. And yet, surely, the whole business starts with the lecturer, doesn't it? (1976 : 7).

The role of the lecturer in promoting the use of the library cannot be neglected. Knapp's study of the Monteith College



experiment (cf. 4.5.7.) confirms the view that "if the teacher believes that the library plays an important part in providing materials for his subject, then his students will also believe and will use the library" (Ford, 1973 : 95). As many of its lecturers are not library-orientated, their own attitudes towards the use of library material may be reflected in curtailed student use of the library. Implicit in much of what has been said in the literature, is that for the successful exploitation of a library's collections, a close liaison between teaching and library staff is essential (Burke, 1970 : 402; Dale, 1975 : 404; Durey, 1973 : 324; Hostrop, 1968 : 141; Mews, 1970 : 9; Michalak, 1976 : 264; Stevenson 1976 : 20).

In the relationship between librarians and academics, if libraries are to succeed as service centres, then both parties will have to have a sense of mutual engagement in a significant enterprise. Librarians will need to shed the rigidities of their professionalism, and academics to dispel their ignorance and abandon their view of a 'master-servant relationship'. This may not be easy to achieve, but it is none the less necessary.

In Mann's view the "weakness of the librarian's position derives from the belief that practically every lecturer holds that he himself could run the library: (1976 : 8).

The reason why the problem persists is perhaps that no consistent tradition of instruction in the use of libraries among academic staff has yet evolved. As Hammond states "It must be kept in mind that it is unlikely that the staff member was ever given any

sort of reader instruction during the years before becoming a lecturer" (1975 : 88).

One reason why academic staff are not always convinced of the need for students to be orientated into using the library Whyte believes, is that some "have learnt to use the literature of their subject very effectively without [the] benefit of a librarian" (Whyte, 1977 : 287).

Harris feels this attitude is due to the 'tradition of of academic apprenticeship' which assumes that at the end of his apprenticeship the student will have 'picked up' whatever he is supposed to know or be able to do "perhaps by sitting next to Doctor of Professor Nellie!" (1978 : 80). In a discussion on undergraduates and books, and M.Sc. student describes her undergraduate years at Oxford University in revealing terms:

I think a lot of the problems I encountered stemmed from the fact that it was always assumed that one would pick things up as one went along, or, better still, already knew all about libraries and things ( Mann,1976 : 78).

The growth of the university libraries' collection is often unappreciated by lecturers, who forget that the student nowadays is faced with a confusing array of material which requires a minimum of explanation if it is to be used effectively (Hammond, 1976 : 88). Brice supports this argument citing the lecturer's familiarity with his own subject as a reason for the difficulties he experiences in understanding "the complexities it presents for the beginner" (1978 : 85). Academic staff may be concerned that

students should only learn what is prescribed and "genuinely think that an invitation to learn to use the library is an invitation to waste time" (Whyte, 1977 : 287).

Another reason why academic staff do not accept the idea of library instruction is put forward by Hammond, who states that "some lecturers do not want students digging out all sorts of things seen as having little relevance to the course" (1975 : 88). Similarly the problem of competition between lecturer and student for scarce library resources can make the librarian's task very difficult. Some lecturers see students "as competitors for books and journals" and may express disapproval of the librarian's efforts to teach students use of the library and how to access information through the use of indexes, abstracting tools and bibliographies" (Whyte, 1977 : 287).

Despite misunderstandings that exist, most academics would agree that there is a definite need for training in the use of the library and that their assumptions about students' actual capabilities in using information sources are often ill-conceived. Hostrop feels there is a 'somewhat uncomfortable awareness' on the part of lecturers that the library should be used more frequently as part of the instructional process (1968 : 141). In some cases academic staff take the responsibilities for library instruction upon themselves, rejecting any offers of help from library staff. The academic staff member's "background and training work against an understanding of the proper role of the college library. He has been trained as a scholar-researcher and not really in how his students use the library" (Farber, 1974 :

16). Librarians are usually not happy that lecturers provide such instruction. Harris discusses this in an article about the Travelling Workshops Experiment which has been trying to solve this problem, and reports that "One of the major obstacles has been that lecturers do not themselves possess the very skills that the students need, in spite of the implicit assumption that they do" (1978 : 80).

According to Biggs there is a widespread perception among academic staff that many librarians do not understand the modes and methods of research in scientific enquiry (1982 : 182 - 201). Stoan reports that "Research scholars, who may make significant contributions to knowledge, seldom possess library skills. Librarians, who possess library skills, seldom do research" (1984; 105). The difference between library skills and the research skills of lecturers who rely mainly on bibliographies and footnotes in the literature, lack familiarity with abstracting and indexing tools (Stoan, 1984 : 106). McCarthy points out that "No one implies ... that academics are ignorant of libraries as collections or as buildings ... and they find and use a great many of the library's books and journals. But they seldom use the library, except perhaps through browsing, to extend their sources of information; they use it to find sources they already know exist" (1985 : 143).

A large, complex university library system may make it difficult for the librarian to establish a rapport with staff. Carlson and Miller advocate establishing "collegial relationships with the teaching faculty beyond the classroom" (1984 : 490). Other

suggestions on how to establish the kind of relationship needed to ensure the trust and shared belief of academic staff in developing library skills in students, is for library staff to participate in departmental seminars, campus committees, and as Dillon suggests, teach a course of library orientation to new academic members of staff (1975 : 5).

Whyte reports that at the University of Queensland, half-day seminars for new lecturers are offered and deal with "collection building, with general patterns of cooperation between academic staff and the library, with levels of literature searching thought reasonable for new students and patterns of literature searching for research work" (1977 : 287).

The library must take the first step in initiating cooperation between academic and library staff (Peacock, 1972 : 135). Public relations and outreach programmes have a role to play if academic staff are to be convinced of the importance of user education (Stevenson, 1977 : 66), and one step in this direction could be the implementation of a faculty liaison committee to ensure good communication (Allardice, 1987c : 1). These measures should convince academic staff that "the library is not just a part of the university services but is a major teaching department in its own right" (Schofield, 1977 : 11), and demonstrate the interdependence of academic and library staff. The need for liaison with academic staff is essential. Integrating bibliographic instruction or other library skills courses cannot be achieved without the full cooperation of the academic staff. In seeking academic staff support librarians should remember that "the best

kind of public relations with academics is the quality of service given to them: (Whyte, 1977 : 340).

#### 4.5.10 Evaluation of User Education.

A realization of need to evaluate user education - particularly its long-term effects - has developed in the last decade. Brewer and Hills observed in 1976 that "there are few references to evaluation in the literature of reader instruction" (1976 : 56). Some studies have focussed on quantitative evaluation measurement techniques (e.g. measurement of periods of instruction) while others have compared the quality of formats used, such as the work by Hardesty, Lovrich and Mannon (1979 : 309 - 17). Little has been written on the long-term effects of user education and their impact on students' later academic achievements.

One such study is by Person who evaluated a semester-long credit course over a six-year period at Southern Illinois University (1981 : 19-25). Person reported that "some 89 percent of the respondents agreed that they had become more confident users of the library as a result of the course" (1981 : 23). Student appreciation of instruction by librarians is high at the time of the instruction course, and increases after the course has ended. Person concluded further, that regardless of the reason for taking the course, most students came to a similarly strong appreciation of its value and recommend the course to other students (1981 : 24).

Sugranes and Neal evaluated a self paced credit course in library

skills and the results of their evaluation revealed a positive student attitude to the instruction course offered California State University at Long Beach. They also found that students expressed a desire for further instruction (1983 : 444 - 57). A qualitative study by Mellon explored the feelings of students about using the library and employed the grounded theory of library anxiety to test the data. Mellon states:

Many librarians have been confused by the literature on the evaluation of library instruction and the difficulty of documenting instructional effectiveness. But with the goal of alleviating library anxiety as an important initial emphasis in a library instruction program and with the use of classroom writing to gather data instruction librarians are provided with a new standard and a new technique for documenting the effectiveness of their programs" (1976 : 165).

Kirk has evaluated the content of bibliographic instruction as a means of measuring student achievement in library use (1975 : 3-4), while Fjällbrant (1975) and Vogel (1972) in turn have stressed the importance of evaluating. Changing student attitudes towards the library as a result of bibliographic instruction. One of the most common methods of evaluation by librarians is observation of students after instruction has taken place. However the problem with observation, is that it is not systematic (Adams, 1979 : 99). The products of instruction can also be measured i.e. bibliographies and references cited in student assignments (Werking, 1978 : 100). Tests and questionnaires completed by students are another means of evaluating user education (Werking, 1980 : 161 - 2). Library use in terms of numbers of books circulated is dealt with in 4.6.

Evaluation procedures of user education provide a number of possibilities. There is as yet no consensus about which way a user education programme should be gauged. Despite a relative absence of literature on the evaluation of user education this section of user education will undoubtedly grow in future. While more attention needs to be paid to evaluating the anticipated outcome of user education it is encouraging to see it become an accepted and indispensable aspect of library service. Nevertheless, proponents of library instruction must continue their efforts to reach those outside the university library's spontaneous clientele: "Permanent acceptance of bibliographic instruction may well depend upon the creation of an enlarged library constituency" (Young & Brennan, 1978 : 24).

#### 4.6 USER STUDIES

Besides orientation and instruction in the use of a library's facilities and services - to promote effective and intensive use of the library - it is essential that libraries know which characteristics of students, lecturers and the academic setting have an impact on library use (Veit, 1975 : 141). Attempts to isolate such factors have been the concern of a number of studies on library use and non-use.

Studies by Branscomb (1940) and Knapp (1959) were landmarks in early research on utilization in academic libraries. Both these studies found that a large percentage of undergraduates made slight use of the library and that a very small percentage borrowed a large percentage of volumes (Allen, 1971 : 25). Most alarming of all Branscomb's comments was the remark that



"undergraduates who make such slight use of the ... library ... would scarcely miss it if it ceased to exist" (1940 : 39).

The next notable study was one by Clayton who investigated the student library user's socio-economic background, and whether this played a significant role in their use of the college library (1965 : 2). Clayton found that there was a slight correlation between the number of books borrowed by students and the occupation of their parents. Significantly, students from homes with the lowest family income group borrowed more books than did students from the highest income group (1965 : 113).

Two American studies conducted in 1962 and 1963 by Barkey (1965), indicated that first year students used the library more than other students, while two surveys carried out in 1962 and 1965 by Line assessed the changes introduced at Southampton University and their effect on usage. Student attitudes to library staff improved noticeably during the three year period and more efficient use of the library resulted (1966 : 123-35).

A study with a community college library was conducted (1965-1966) by Hostrop. At the College of the Desert Hostrop attempted to discover a relationship between use of library materials and factors such as academic success, sex of the student, and amount of course work completed. Hostrop found that students who achieved academically at high school and college were heavier library users than were low achievers. The library user was "more likely to be a female than a male student" and the library nonuser more likely to be "a male than a female student" (1968 :

126). Branscomb (1940) and Knapp (1959) had both found a less close correlation between academic achievement and library use. Line likewise found that female students borrowed more books than male students did (1966 : 123-135).

Hostrop also urged that close attention be paid to the nature of library instruction as its impact "is more decisive than any other factors that influence library use" (Veit, 1975 : 143). Culley, Healy and Cudd examined whether students are being sufficiently trained, finding that "less than 50 percent of the undergraduate students sampled rated themselves as frequent borrowers of library materials" because of lack of instruction (1977 : 294).

According to Wood, libraries serve only a small proportion of the communities that could use them and that "amongst those who failed to find the information sought, 65% of the undergraduates ... did not consult the catalogues, abstracting tools or, members of the library staff" (1971 : 19). The importance of students learning how to use the library properly is stressed by Whyte who maintains that it is "essential that they can look up in a catalogue or find a book on the shelves; not just so that they can pass an examination but also that they can keep up in the world beyond their first degree" (1977 : 291). The general assumption long held by librarians in many parts of the world that students can pass courses without any library use was confirmed by the findings of Sauders, Roberts and Wickison (1961 : 138).

Motivation for student use of a library has been based on four major considerations, viz. :

- a. 'the purpose of the library visit'
- b. 'the subject matter of the materials used'
- c. 'the reasons for the use of specific materials'; and
- d. 'areas where materials are used' (Knight & Nourse, 1969 : 107).

Confirmation of these factors is affirmed in various findings. Jain reported in a study at Purdue University that 60 per cent of students used their own textbooks or other material in the library. On average users spent two hours and twelve minutes in the library and used three books (1966 : 211-18). Surveys of book borrowing by Knapp (1968), Lane (1966) and the University of Durham Computer Unit (1969) have shown that students confine their borrowing almost exclusively to course material. Osundina determined that when access to the library was improved, undergraduate student use of the library increased (1975 : 77-81). Similarly, distance between the main library and departmental libraries also has an influence on use of the library by undergraduates (Sauders, Roberts & Wickison, 1961 : 139), while at El Camino College a survey showed that 90 per cent of students used the library as a study hall (Horn, 1966 : 30-77).

Research by Sellen and Jirouch into usage of the library showed that differences exist between academic staff expectations of students' library use and the students' perceptions of library use to supplement class handouts (1984 : 264). Students did not

perceive library use as strongly as academic staff, and used high school library research skills to access secondary as opposed to primary source material. Sellen and Jirouch strongly emphasized the need for academic staff to provide direction and for more extensive library instruction (1984 : 267).

It is evident from the surveys reported that many undergraduate students do not use the library, that students who do use the library's facilities use their own textbooks, and that library instruction is essential if the situation is to be remedied. The obvious implication for libraries, from all of these studies, is that the library's contribution to the educational programme has not been fully extended. It is to be hoped that if more use is made of the library and the more successfully it is used by its users, so such use will become more intensified. Kennedy maintains that if a collection is not used effectively then "librarians are not doing their job" (1970 : 1453).

Defects in library service often come to light in such surveys, but in the end it is often found that non-use is due to a failure of the library to comprehend the motivations and preoccupations of its readers. There is a failure to put the message across. Library-use surveys are analogous to commercial market surveys claims Whyte, who suggests a concentration on "publicity and other promotional means" to promote library use (1977 : 337).

#### 4.7 INFORMATION RETRIEVAL AND INFORMATION SERVICES

Information retrieval is an area which is most likely to have the

most impact on the library user, as the immediate aim is to locate a particular piece of information. The term 'information retrieval' is in itself a misnomer, since what is supplied is most often a bibliographic reference or citation and not the actual information (i.e. the very content of the source cited). Information retrieval systems consist of roughly two broad classes : current awareness services and retrospective services (Rowley & Turner, 1978 : 213).

A current awareness service has been defined by Kemp as :

... systems for reviewing newly available documents, selecting items relevant to the needs of an individual or group, and recording them so that notifications may be sent those individuals or groups to whose needs they are related (1979 : 12).

In such a current awareness service it is important to provide references to current literature. The volume of data handled by the librarian is usually small and descriptions of user needs may be less precise. On the other hand, retrospective searching involves the handling of a greater volume of data, and therefore the librarian's search techniques must be more efficient and user needs precisely stated. The relationship between the librarian and the user being vitally important to the whole process and with time becoming "more obviously mutually supportive" (Merrett, 1985 : 201).

According to Line, an information service would include :

- a. 'personal help, extensive if required, with reference queries of all kinds';

- b. 'retrospective searches, whether manual or computer-aided';
- c. 'current awareness, whether to individuals or groups, whether manual or computer-aided (including profile construction for external services)'; and
- d. 'translation services' (1974 : 3).

Line also states that "other services may be implied in these, or result from them" (1974 : 3).

In the context of a university library, a 'profile' of the client (lecturer or student) would be prepared and recorded - most likely in machine-readable form. The client, or even group of clients (for example, an academic department) would be sent notification of items in the literature which match his profile or statement of requirements. This service is selective dissemination of information (SDI) (Kemp, 1979 : 32). SDI has been defined very briefly by Rowley and Turner as "a current awareness service geared towards the individual" (1978 : 232).

The concept of 'current awareness' Cooper maintained some eleven years ago, "is unfamiliar to most of the university community in the industrialized West especially students", but when it is explained as a search "which is repeated at regular and frequent intervals to keep someone up-to-date with new literature and which is used for long-term interests of six months or more ... most patrons, including undergraduates understand" (1976 : 234). (The position may well be different today.) University libraries regularly keep academic staff advised of new books added to the

library's stock by means of accessions lists or library bulletins. They also distribute new-book announcements which is one way of keeping the lecturer aware of what is going on in his field. These are mainly current awareness services for staff and seldom available to students. Most accessions lists are too extensive for student use and 'virtually useless' to students (Page, 1977 : 318). A good booklist of new 'really well worth reading' books might stimulate students to read books they might otherwise not have read (cf 'Great Books Program' 2.4.3.3).

"Journal-circulation services are possibly the most basic forms of dissemination practised in a library" two researchers reported in a survey published in 1978 (Rowley & Turner, 1978 : 196). Periodicals may be circulated to academic staff in some university libraries, but this poses problems for libraries who find it virtually impossible to keep borrowers to any firm time limit, and journals are thus unavailable to other users for general use for long periods of time. Selective circulation (differing from issue to issue of the same journal), subsequently reduces the number of borrowings by academic staff and the time each issue is away from the library. Loans are thus concentrated on staff who are likely to make use of the journal for teaching or research. In most instances the normal practice is for the library to place the onus on the lecturer to select issues which he wishes to read, thus compelling the lecturer to come into the library at regular intervals. Page asserts that "A good teacher should visit his library at least once a week to scan the latest issues on display" (1977 : 318).

Quite a high proportion of academic staff do not visit the university library regularly to look at periodicals. Page estimates that this number ranges from 30 to 90 per cent of a typical American university community. The reasons, he cites, may be geographic, just plain laziness or overwork. Moreover, many academic staff subscribe to their own copies of periodicals, while others rely on research assistants and other staff to scan the latest journals on their behalf, in an approach which does result in really efficient coverage. Therefore, it is up to the library to stimulate use of its resources by offering a current awareness service (Page, 1977 : 318).

One of the most common type of service which is easy for library staff to manage, is the circulation or distribution of photocopies of the contents pages of newly-arrived journals. Undoubtedly the best type of information service is a tailor-made one where members of the library staff set out to become familiar with the interests of members of the academic staff, scan all the literature and bring items to the attention of those interested, by personal contact or by sending photocopies. However, many libraries do not have the resources to do this. Merrett records the success of such an SDI service during the period 1981-1984 at the University of Natal Library, Pietermaritzburg. He concludes that the opportunity such a service affords library staff gives them valuable insights into the various disciplines with a spin-off in terms of subject cataloguing, classification, stock building and their professional role in the academic community. The librarian's role emerges as not only educational but also bibliographic, and this contributes to a cost-efficient library



usage (1986 : 200-2). While many information systems are automated, Merrett contends that the manual, in-house SDI service still has an important role to play in academic libraries (1986 : 200).

Through SDI services the user can be informed regularly and soon after publication about the relevant articles and reports published in his research field. The library tells the lecturer or student what is available rather than simply waiting to be asked. This helps to create the impression that "the library cares - as it should care but is not always seen to care - about the subjects on which its readers are working" (Mews, 1970 : 10). Inevitably the bibliographic services of the university library become more important and potent as they are converted into machine-readable data bases and are linked to other data produced overseas. The provision of computer-based information services enables university libraries to play a more active role in the dissemination of information rather than opting for the traditionally more passive role. A spin-off may also occur with the proliferation of such computer-based information services, as more conservative members of academic staff realise the need to become more conversant with the literature of their subjects, and as universities see a rapid growth in the spread of courses. Students who use libraries with such services should be better prepared to handle the variety of material available to them in the future.

#### 4.7.1 Information Retrieval in South Africa

Most of the work in information retrieval as micro-analytic bibliographic services was done in the past by special libraries in South Africa. Increasingly, however, South African university libraries have been setting up local information services. They also utilize the services of the South African Council for Scientific and Industrial Research (CSIR) extensively. Current awareness searches and SDI profiles are requested by correspondence or telephonically from the CSIR's Centre for Scientific and Technical Information (CSTS) and of the Medical Research Council's Institute for Biomedical Communication (IBC). Online searching of overseas bibliographic data bases such as DIALOG and MEDLINE is undertaken at some South African university libraries although "the major inhibiting factor appears to be the present high telecommunication costs" (Lor, 1981 : 81). These databases are accessed via the South African packet switching network, SAPONET (Van Brakel, 1985 : 38). Colenbrander reports that at the University of South Africa's SANLAM Library online searches are undertaken for lecturers and post-graduate students only (1984 : 26).

The development of the South African Bibliographic and Information Network (SABINET) has had a big impact on its member libraries since its inception in 1983. Libraries recognise its benefits as a reference tool, an indicator of national holdings and a bibliographic finding tool. SABINET provides economical dial-up access via the SAPONET-P switching network using an IBM PC or equivalent with a low-cost standard asynchronous software

package available from SABINET. This method and the equipment used is essentially the same as that used to access overseas databases such as DIALOG. It means that it can provide a low-speed alternative for small volumes of work to the existing IBM or IBM-compatible synchronous terminals which some libraries currently use (SABINET, 1985 : 2). The effect of SABINET on users means a better information service and an ability to provide immediate print-outs of bibliographies on research topics. It will also have far-reaching effects as an information transfer medium as Brunt contends : "In Suid-Afrika sal die ontwikkeling van SABINET en SAPONET waarskynlik daartoe bydra om elektroniese dokumentlewering moontlik te maak en die instelling daarvan te bespoedig" (1986 : 65). It will likewise create opportunities for new information services. BELTEL - which is a videotex service of the South African Post and Telegraph Service - is a special kind of online database host available to South African libraries. According to Colenbrander, it presents "virtually limitless opportunities for development" (1984 : 26).

#### 4.7.2 Information Retrieval to Undergraduates

Geahigan's American survey in 1981 of undergraduate use of online searching at Purdue University revealed that the students made relatively little use of such a service. She predicts that with "the advent of technology, the growth of information, and the fast pace of life today, online searching will soon be a regular part of academic life" (1981 : 22).

While such online service may not necessarily be useful to

undergraduates at an early stage of their courses, Goodman expressed the belief some time ago that towards the end of their courses they would benefit from such a service (1974 : 15). Although according to a survey conducted seven years later, students seemed receptive to the idea of online searches, Geahigan felt that the major barrier to their use of this service at that stage was the cost involved. She suggested that extra funding would either have to come from university libraries or the commercial suppliers of databases (1981 : 22). Viewed as a long-term issue, Culley, Healy and Cudd contend that if students are to succeed in their desire to master the technicalities of online searching they would first have to become much more sophisticated researchers utilizing information services more extensively (1977 : 293).

Durfee observed that on-line searching is not a service which reader services staff emphasize for students at present. She contends that should student know that such a service were offered at their institutions it might well be more heavily used (1986 : 298).

#### 4.7.3 Inter-Library Loan

In as much as university libraries have begun to appreciate the ever-growing problem of organizing their resources adequately, it has become more and more apparent that their ability to exist as self-contained, independent units has been diminishing. At the most basic level inter-library loan systems have become acknowledged as essential services in academic libraries.

Although such services will never be regarded as an adequate substitute for those of having the needed library collection readily available, the new technology contributes much to easing user frustration with regard to the usual delays and other deficiencies of the national and international inter-library procedures of the past.

Electronic messaging facilities to provide speedier inter-library loans have been provided by different types of overseas networks for some years. In the United States both the OCLC (Online Computer Library Center) and ALANET (the electronic information service of the American Library Association NETwork) provide this type of service to users. In South Africa, the new SAMARC-based (South African MAchine Readable Cataloguing) bibliographic and information system known as SABIMAIL has an electronic messaging facility. The system which became available to SABINET members in October 1986 was specifically designed by SABINET for the use of Southern African libraries. This has brought a new dimension to the resources of the South African library and information community, enabling speedier communication between users for the rapid processing of inter-library loan requests. SABIMAIL also provides an electronic bulletin board facility which will provide support for such functions as general user communication, committee work, and the advertising of staff vacancies. It allows for instant message forwarding and multiple message delivery between electronic 'mailboxes' using computer terminals (SABINET, 1986 : 1-3). Such facilities as SABIMAIL and SABINET if backed up by telefacsimile transmission of text or possibly the airmail posting of microfiche copies will, within the next few years,

render inter-library loans possibly the 'key' service of any university library.

As the importance of fast access to information is assured through computers, microform and facsimile transmission, librarians will find another problem facing their service to users. The cost of inter-library loans will rise considerably and therefore the benefits of those services will be questioned and debated by academic staff.

While inter-library lending procedures in a great many cases are reasonably efficient, with delays that have become accepted, readers often develop expectations of service which simply cannot be fulfilled. Consequently they are surprised when the service fails so palpably on occasion. The main reason for the inefficiency of inter-library lending services is that the system is based on the principal of voluntary cooperation. University libraries argue that they cannot be expected to give top priority to the needs of other libraries if their staff resources are over-loaded with regard to their own immediate demands. In requesting users to limit their inter-library loan requests, Allardice explains the reasons accordingly :

Firstly, libraries in the network have appealed to us not to flood them with requests and secondly, our own staff cannot cope with the volume of requests. Although we do try to work steadily through all requests, there will obviously be times when we will make exceptions and allow a few more - we are always happy to discuss individual problems (1987b : 1).

Inter-library lending has grown phenomenally and even two decades

ago the system was reported to have been subjected to great strains in the United States (Becker, 1969 : 316). This imposition on university libraries, which are experiencing the very severe effects of inflation and the current adverse economic situation in South Africa, has forced libraries to make cutbacks with their inter-library loan services as well as cuts to their book and periodical budgets. Allardice contends that :

Together all libraries have suffered reductions in their staff salary budgets with some of the larger libraries being forced to drastically reduce certain services. Inter-library loans is one service area which is proving an increasing burden on all the major supplying libraries (1987b : 1).

Similarly she goes on to expand about the predicament which a small university library faces :

The University of Fort Hare library is not a major supplier of Inter-Library loans. Last year we lent approximately 10% of the amount that we borrowed from other libraries. In other words, we are borrowing 1000% more than we lend out. At the moment we are just managing to cope with requests from our own users and from other libraries with one member of staff. From the figures above it would seem that these other libraries who supply our users, would need to employ at least 10 members of staff to cope with all the Fort Hare requests! (Allardice, 1987b : 1).

In some cases the material may be held at a library either not under the charge of a professional librarian at one extreme, or by a librarian incapable of responding quickly and efficiently to the demands of readers from all over the country on the other. The task of the librarian in servicing an inter-library loan service which is held in such a library or a library overseas is not easy. It is an important liaison activity for library staff

to familiarize demanding users with these limitations of the inter-library loan system. Thomson has stated, for example, that "most readers do not know what to expect of inter-library loan" (1970 : 19). Allardice clarifies the position as follows :

Inter-library lending has to operate within certain guidelines that have been established and the University of Fort Hare Library must conform and work within these parameters, as failure to adhere to these will jeopardise our position in the national network (1987b : 1)

The cost of inter-library loans is likewise a crucial aspect to which the attention of users should be drawn. The system is open to abuse by users who see the service as very much an extension of their own research work, failing to appreciate the cost-factor involved. Allardice points out that :

Inter-library lending is a heavily subsidised service which is costing libraries a tremendous amount of money. Contributions from users is only a small proportion of the actual cost involved - which is not easily determined as these vary from institution to institution, and loan to loan. While we are not in any way trying to discourage academic staff from using this service, we appeal to them to use it with a certain amount of discretion and responsibility (1987b : 1).

#### 4.8 COMPUTER TECHNOLOGY SERVICE

New advances in computer technology mean that they are becoming an integral part of university libraries. Online systems cannot operate without them. Most automation activities develop initially either in circulation or technical services areas such as acquisitions or cataloguing.



In future, direct service to readers in academic libraries will be influenced and much improved by the use of computers in libraries. People using such libraries will increasingly be lookers and listeners as well as readers, and they will also care less about the form in which the information they seek is presented (Whyte, 1977 : 310).

To enhance the productivity of reference librarians, especially when such staff are off duty, libraries might provide a 'robot at the reference desk' - a microcomputer programme designed to provide reference assistance. Smith describes an experimental programme at the State University of New York library and contends that "the computer will occupy a position of importance in the reference setting" since they "provide a consistent, if minimal, level of service at the reference desk, freeing the librarian to work on problems requiring more creativity or demanding greater intellectual effort" (1986 : 489).

The combination of the increasing difficulty of, and need for, quick access to information and the emergence of the computer as the tool to handle this information has made library services a vitally important part of modern society. The possibility exists of improving these services beyond our dreams. The possibilities for service have never been greater, since adequate library service will depend on the computer.

#### 4.9 MICROFORM SERVICES

One technology which has had a profound effect on a library's

collection activities is the development of microforms as both library material and tools of the trade. The impact of micro-reprography may not have been as noticeable as other technologies such as computerization or photocopying, but it has been increasing in importance ~~and~~, although according to Edelman it "is now generally recognized as only an interim storage medium" (1984 : 220).

The use of microforms has been encouraged by the fact that indispensable bibliographic tools in libraries can be purchased at a lower cost in microform than in hard-copy print format. This is true, for example, of the microfiche format of the National Union Catalog and Books in English. Other factors assisting in the spread of microforms are the availability of reasonable quality but cheap readers and the need for reprints of out-of-print material. In addition, microforms are surprisingly cheap to produce, and compact to store. They are useful for preserving archival and bulky material in a more durable and compact form. Bansa believes microfiche to be the best medium for this reformatting (SAILIS, 1986 : 2).

The problem that material is not always readily and speedily available is often overcome by the increasing use of microfiche and the use of such in inter-library lending. As microform readers improve and the cost of books, and inter-library loans and other service rise, more academic libraries might contain an increasing number of microfiche readers. Whyte believes it will be cheaper to lend or purchase the microfiche than to purchase the journal or copy of the book (1977 : 309). However, Stoa

criticises the microform collection for being 'unbrowsable' and cites the checking of footnotes as particularly frustrating to academic staff : "Reeling back and forth from text to endnotes on a microfilm reader is a maddening exercise" (1984 : 108). If a university library does have a large microform collection, bibliographic instruction for undergraduates is even more of a prerequisite if they are going to be able to access it.

#### 4.10 PHOTOCOPYING SERVICES

Photocopying or macro-reprographic techniques have developed a long way since the first wet photocopying machines were used or even the dry copying methods. The most difficult aspect of copying today is no longer technological or financial constraints, but rather the problem of copyright protection.

The value of photocopying to university libraries lies in the ability it offers for disseminating texts for the benefit of students and academic staff. It is possible to ensure a fair distribution of material in heavy demand at the reserved book room or short-loan collection, by making several photocopied copies of the same material available. Photocopying has significantly reduced the need for students to laboriously hand-copy material out of books and journals. Since "book theft is on the increase and its cost is formidable" (Bahr, 1978 : 3), the presence of a number of photocopying machines in a university library may significantly reduce such theft. The photocopying of non-copyright material, for example, lecture notes and thesis drafts, has been greatly aided by photocopying.

The problem of copyright is common to all university libraries. Most copying of material is done by students at universities who use such facilities extensively. Inter-library lending also makes use of photocopying since this saves on the wear and tear of original material. The use of photocopying can prevent individual users from monopolizing items which, especially in universities, are difficult to recover. While photocopying machines continue to improve, such developments are threatened by the uncertainties of the Copyright Act.

In South Africa, Musiker has compiled Guidelines to the Copyright Act no.98 of 1978 (as amended) and the reproduction regulations (1987 : 1-9), which assist university libraries in ensuring that copyright is not infringed. As librarians are governed by the terms of the Act, they are often placed in an invidious position in how to assist the flow of information without infringing copyright. Allardice states, with reference to the South African situation, that "Libraries have very sincere problems with the Act and the interpretation of it has taken up a lot of the time of senior library staff and the legal profession throughout the country" (1987b : 1).

University libraries encounter problems with students and other library users using photocopying machines. Coin operated machines result in library staff time being wasted on counting cash, providing change, balancing machine readings against cast totals and unjamming coin boxes. Security problems with the handling of cash also pose headaches for library management. The pricing structure is also relatively inflexible in so far as libraries

are dependent on coin boxes with fixed denominations. Edwards reports that the University of the Witwatersrand library has recently installed a magnetic card system to control the use of photocopying machines. This reduces staff involvement and allows students to purchase their cards for nominal amounts and 'upgrade' these on an upgrading machine. After initial user resistance, Edwards states "users have become accustomed to cards" and have "a positive attitude" (1986 : 5). The provision of photocopying services in university libraries has become one of the major service areas and it seems inconceivable how the undergraduate could cope without it.

#### 4.11 SUMMARY

Adjustment to change is difficult and the library world is presently being subjected to immense change on almost every front. In the same way as libraries must adapt to meet new conditions of service; so too must librarians make the necessary adjustments. Since the library is a service organization, changes to reader services in university libraries will follow changes to research patterns, teaching policies and courses. Although such change may be initiated externally, the degree of response to change depends on library staff. The degree of integration between the services of the library and the needs of academic staff and students will depend on the efficient liaison between them and library staff.

The expansion of reader services requires an even greater response to users, especially in teaching the use of the library

to undergraduates. There are challenges to the librarian in the form of audio-visual material, computers and even from the extensive use of photocopying machines, problems arise for librarians about the Copyright Act. The consequences of these changes to the reader services operation are likely to be profound.

In older university libraries the idea of direct service to users and the concept of the importance of the library in its own right, and not merely as an aid to academic achievement was not very prevalent. Traditionally, librarians have regarded the use or non-use of the library by students as of relatively little interest and had "in many cases seen the academic user as of paramount importance" (Whyte, 1977 : 286).

It gradually became evident that the library's collection had grown so enormous, and that students were so bewildered by the vast amount of material, that it was necessary to provide some measure of orientation for use. In addition, lecturers had become discouraged by student assignments that betrayed an ignorance of basic reference sources, and thus course-related library instruction developed (Kennedy, 1970 : 1453).

One fact that emerges from the review of the literature of the different library orientation programmes is that "no one means ... seems to have any advantage over any other in terms of effectiveness in imparting knowledge" (Ford, 1973 : 96). It is also inevitable that with the increasing sophistication of educational methods, the emphasis on learning as opposed to

teaching, that the library's users will not be daunted by libraries and the technologies they find there.

There is a need for more varied and especially more systematic instruction in library usage, and an expansion of the various forms of day-to-day assistance offered to undergraduates. This expansion of services to students must inevitably improve relations with such users. University libraries will only reach their full potential as service areas if their quality of performance is high and if they play a more active role in the provision of information.

Librarians must remember that a library is only as effective as the people who use it, and a library instruction programme is most effective when the library staff, administration and academic staff are committed to it in terms of time, energy and financial support. Support from the academic staff is vital in any user education programme. By educating users the librarian aids them in communicating with, and understanding the library. This newfound insight presents another way of improving both the intrinsic quality of library service and the public image of the library.

In evaluating library service, Schofield has written that he considers this "to be the all important area if you are to withstand criticisms and pressure for cuts or even maintaining your present standards of staffing" (1977 :11). A systematic evaluation of all the services provided is, according to Glossop "partially irrelevant due to the unquestioning acceptance of the

objective method and its inherent postulate that there can be no quantitative relationship between users' attitudes and the quality of a library. Although attitudes can be measured, the objective method is an inadequate tool for coping with the very complex problems associated with social research and so the user is virtually ignored" (1978 : 25). Nevertheless, university libraries must continue their present efforts towards improving the cost-effectiveness of their basic operations and staff resources, so that larger amounts of the library's resources and efforts can be invested in undergraduate service.



## CHAPTER 5 : UNDERGRADUATE LIBRARIES

### 5.1 CHARACTERISTICS OF THE UNDERGRADUATE LIBRARY

The movement towards setting up undergraduate collections and even separately housed undergraduate libraries at North American universities, increased considerably after World War II. Writing in the late 1960s, Mills pointed out that "more and more [American] universities appear to be following this pattern, so that it would seem that a definite trend among academic institutions has started" (1968 : 144). However, as will be shown later in this chapter, not all universities viewed this movement favourably. Therefore before looking closely at a number of universities with separately housed undergraduate libraries, it would be appropriate to examine the reasoning behind their establishment.

Muller holds the view that the undergraduate library can be "viewed as a necessity in alleviating the difficulties encountered by students trying to find their way through a huge research collection that had usually been assembled more for the use of the faculty than the students" (1970 : 114). Muller is supported by Veitz who argues that "When a library serves several levels of students there is a tendency to favour those who are advanced" (1976 : 373). Muller believes that "Undergraduate libraries were thus usually developed largely as a reaction to an intolerable situation" (1976 : 373).

But what had brought about this 'intolerable situation'? It has been suggested that the increasing emphasis placed by universities on advanced study and research in the post World War II years, had adversely affected the service offered by university libraries to undergraduate students. Alternatively, it may have arisen as a result of the failure on the part of university libraries to keep up with educational developments which in turn led to inadequate "library buildings, book collections and service to readers" (Moss, 1966 : 88).

Certainly the increasing complexity and the changes in university education which had come about in the second half of the twentieth century, necessitated a re-think on library services for undergraduates. Lynch remarks in this regard that "Two new purposes, research and service, were added to the fundamental purpose of education" in its changed dispensation (1978 : 11). The service aspect has indeed had a marked influence on undergraduate library provision. Haak has gone so far as to characterise an undergraduate library as a "service-centered institution" (1970 : 5), while Veitz has written, "The undergraduate library has often adopted a broad concept of library service ... service to the student is the main concern" (1976 : 374).

In an attempt to determine the essence of the undergraduate library service concept, it is useful to bear in mind what Moss has written on the subject:

... much of the theory of undergraduate library service has tended to follow rather than precede the practice, and some of it has little or no bearing on current developments. It is difficult, therefore, to speak of a concept in relation to undergraduate library service in any but the broadest terms (1966 : 86-7)

The rationale behind an undergraduate library would seem to be based in the main on a belief "that the undergraduate reader has special needs of his own which can only be met satisfactorily with special facilities and a positive attempt to improve library service to this type of reader by providing the facilities which are thought to be necessary" (Moss, 1966 : 86)

An awareness of undergraduate student needs and their long-felt neglect is demonstrated in an article by Veitz in which he, contends that "there is a tendency at universities to favour those who are advanced" in their courses of study to the detriment of undergraduate students: "Graduate students are thus frequently given more consideration than undergraduates. Even if there should be completely equal treatment of all students, the beginner might find it awkward and confusing to make his way through a very large collection, for most of which he has no use" (Veitz, 1976 : 373). It is precisely this need for a separate collection of materials which has led to the establishing of reserve book collections and, ultimately, of "undergraduate libraries which are an outgrowth of such elemental beginnings" (Muller 1970 : 114).

As far as the latter is concerned Hoadley has listed six basic ways in which a separately housed undergraduate library differs from a traditional university library:

- a. 'by providing open access to the collection to avoid the difficulties of the closed stack system';
- b. 'by centralizing and simplifying services to the undergraduate';
- c. 'by providing a collection of carefully selected books, containing the titles all undergraduates should be exposed to for their liberal education, as well as incorporating the reserved book collection';
- d. 'by attempting to make the library an instructional tool by planning it as a centre for instruction in library use, to prepare undergraduates for using larger collections and by staffing it with librarians interested in teaching the undergraduate the resources of a library and the means of tapping those resources';
- e. 'by providing services additional to those given by the research collection'; and
- f. 'by constructing a building with the undergraduate's habits of use in mind' (Hoadley, 1970 : 1).

Rebman claims that some libraries that are called 'undergraduate libraries' "without meeting all of these criteria; others meet the definition but do not include 'undergraduate' in their names" (1981 : 330).

Wingate aptly sums up the essential nature of the undergraduate library in the statement: "The basic tenet of the undergraduate library is that undergraduate students have abilities, needs, and preferences in areas of library use that are quite different from the abilities, needs, and preferences of graduate students and faculty members" (1978 : 30).

Before proceeding further it might be useful to define more clearly what is meant by an undergraduate library.

## 5.2 DEFINITIONS OF THE UNDERGRADUATE LIBRARY

One of the most commonly cited definitions of an undergraduate library is one by Haak. He has defined it as:

- a. 'a special library for undergraduate students';
- b. 'located in a university or other institution supporting graduate work to a significant degree';
- c. 'housed in either a separate building or in a self-contained section of a general building'; and
- d. 'consisting of a collection designed to support the undergraduate curriculum, and a staff and services which promote the integration of the library into the undergraduate teaching program of the university' (Haak, 1971 : 1578).

The concept of the undergraduate library has been described by Muller as "not entirely satisfactory since graduate students have also found such libraries useful when they had to venture into fields in which they were not specialists." Muller believes that "The designations 'college library', 'curricular library' or 'general library' are equally inadequate in conveying the full flavour and the intent of these ... libraries and services" (1970 : 114). Indeed Haak has noted (1970 : 2) that "several undergraduate type libraries have avoided using the term 'undergraduate library' in their names", and he goes on to say that "While there may be no such thing as a purely undergraduate level book", (1970 : 3) the uniqueness of undergraduate library must set it apart.

Orne remarks that while an undergraduate library "is first of all a study hall, it is primarily a good place to study" (1970 :

2231). Continuing the debate on an appropriate designation for the undergraduate library, Jones claims in a paper that the decision to call the undergraduate library at the University of California in Los Angeles (UCLA) the 'College Library' is a result of the College Library's basic philosophy to provide strong curriculum support and because it does not want to suggest that it is "restricted to undergraduates or limited to elementary content - or, conversely, that undergraduates should be excluded from any of the campus's research libraries when advanced work in their major fields requires specialized materials" (Jones, 1971 : 584).

Wingate notes that the "terms being used include the designation 'College Library' at Columbia University 'Course Support Library' at Notre Dame University, and 'Cross-Campus Library' at Yale University. Other terms used are 'core collection' and 'intensive use collection' "(Wingate 1978 : 30) However, Wingate maintains that "Regardless of the name, all such collections, whether separate or in-house are based on the same tenets and serve the same purposes" (1978 : 30).

For the purpose of this thesis an undergraduate library will be presumed to be a collection of books and periodicals and other forms of undergraduate study material separately housed, either within the main library or in a separate building and providing a centralized and simplified service to undergraduates.

### 5.3 HISTORICAL DEVELOPMENT OF THE UNDERGRADUATE LIBRARY

We can ask ourselves - Why undergraduate libraries? Why were existing university libraries not fulfilling students' needs? What was inadequate about them?

Hoadley suggests the following answers to these questions;

Until this century, most universities and their libraries (in North America) were small, and more important, they were largely undergraduate institutions. The increase of graduate education which resulted in larger and research orientated collections compounded the problems of the undergraduate in using the university library. Larger numbers of students also made the library difficult to use because it was crowded - study conditions were unsatisfactory and staff was insufficient to handle the volume of work. The undergraduate only had free access to reserve books which proved to be educationally stifling (Hoadley, 1970 : 2).

Kuhn in his turn believes that "certain conditions have prevailed at campuses where undergraduate libraries have been or are being built. These include the sheer size of general library collections on these campuses, the serious need for additional library space and the pressures of mounting enrolment. Equally important with these physical factors is the changed climate of concern for the undergraduate in terms of proper library service" (1970 : 1).

Similarly, new teaching methods encouraged undergraduates to read widely and more independently and to use the library more frequently, as teachers moved away from the traditional textbook teaching pattern. Braden considers for example, that "the undergraduate was trapped by this ... increasing emphasis on the

use of the library at a time when the library was becoming increasingly difficult to use" (Braden, 1970 : 2).

### 5.3.1 Historical precedents of library service for undergraduates in the United States and Great Britain.

British "universities were at first slow to realize either the necessity for a library or its necessary size and scope; most of them passed through the stages of a cupboard, a room which also served for other purposes, a room devoted to the library, and a series of rooms adapted with greater or lesser success" (Roberts, 1977 : 461). Nevertheless it is generally agreed that the first undergraduate library prototype was established in Britain. Authorities like Braden (1970 : 1), Moss (1966 : 87) and Wagman (1956 : 150), claim that undergraduate libraries owe their origin to Thomas James, who suggested in 1608 that an undergraduate library be established "to serve the younger students at Oxford" (Wilkinson, 1978 : 3). However, as James' suggestion was turned down by Sir Thomas Bodley, it was not until 1856 that the Bodleian Library at Oxford University deigned to allow undergraduates access to the library (Craster 1952 : 145).

In the United States, library provision for undergraduates likewise remained grossly inadequate for a long time. Rebman remarks that "the idea ... did not really arise in the 19th century." (1981 : 331). Louis Shores assures us however, that "the undergraduate library, although a recent phenomenon in higher education, has been in the making for a great many years" (1959 : 1).



Orne has called the early period of undergraduate library provision BL 1, i.e. Before Lamont. He argues that "any consideration of undergraduate library service takes the Lamont Library at Harvard as its point of departure" (1970 : 2230). Certainly Harvard has played a key role in the development of undergraduate library provision. Established in 1963, Harvard University first made a small library available for undergraduate use in 1765 (Wilkinson, 1978 : 4). The first definite proposal to establish a separate undergraduate library at Harvard was submitted by Andrew Norton in 1815 (Metcalf, 1947 : 35).

However, nothing came of this proposal at the time. Undergraduates at American colleges continued to find the library service generally limited and the bookstock insufficient for their requirements, and tried to remedy the situation by founding society libraries (Lovett, 1947 : 221). Society libraries too, did not fulfil the undergraduates' requirements, and subscription libraries managed by students constituted the next attempt made by the undergraduates to combat the lack of university library facilities (Elkins, 1954 : 52).

As the twentieth century unfolded, colleges and university libraries in the United States "began to set aside reading rooms, special collections, and reserve books for their undergraduate students" (Wilkinson, 1978 : 7). This was the American universities' response to the tremendous growth and expansion of university education. But it was far from satisfactory, and despite futile attempts to improve undergraduate library provision at Harvard University for example, most of these changes

benefited users in general and not specifically undergraduates. Lovett points out that "It would be a mistake to assume any real division between the treatment of undergraduates and that of graduate students and scholars". The new library at Harvard University, known as Widener Library, was officially dedicated in 1915 had an enormous reading room, but failed to attract undergraduates (Lovett, 1978 : 21).

In Britain the University Grants Committee (U.G.C.) in 1921 noted that "An adequate library is not only the basis of all teaching and study; it is the essential condition of research without which additions cannot be made to the sum of human knowledge." (U.G.C. in pref. by T F O'Connell in The University - the Library, 1971 : 4).

These sentiments were echoed in the United States where concern for undergraduate education was beginning to be voiced. In 1925 a student newspaper at Harvard reported that "The Widener of today is cold, formal ... a ponderous mechanism which only the skilled graduate can rightly use" (Crimson, 22 Jan. 1925). Undergraduates were finding university library collections increasingly difficult to use; crowded rooms and too few library staff compounded the problem.

1930-31 marked the opening of seven house libraries (i.e. intended for general reading purposes) at Harvard and the beginning of a more viable undergraduate service, which was to culminate in the opening of a separate undergraduate library at Harvard - known as the Lamont Library - in 1949. Indeed, Harvard

had a vastly decentralised collection, in addition to the Harry Elkins Widener Memorial library (called the Harvard College Library), the house libraries, several reserved book rooms, and over forty departmental, special and other libraries in 1940 (Metcalf, 1978 : 25). This "extreme example of decentralization" (Orne, 1970 : 2230) meant that the central library - Widener - had become, as Orne put it, "increasingly less able to serve as a general library for the typical undergraduate student". Although Metcalf largely attributed the need for a special library facility for undergraduates to the diversified library facilities, he considered the obstacle of the large catalogue (containing approximately 5 million cards at the time) an additional handicap with which students had to contend with (1978 : 31). And it is these two factors - decentralization and the size of the collection - which had the strongest influence in leading to the establishment of a separate undergraduate library, although Orne would argue that a third factor is equally important, namely the tremendous increase in the undergraduate student population in the early post World War II years (1970 : 2230).

It was finally the pleading of Keyes Metcalf, who had been urging Harvard administrators for the best part of a decade, which finally led to the building of a separate undergraduate library at Harvard. But this was not before undergraduate collections had begun appearing as special book collections housed in the main library of the large universities - Columbia University and the University of Chicago were two with 'undergraduate collections' within their main library buildings.

In the case of Columbia University where the central library building had a separate facility for undergraduates called the Butler Library (although known to students as the College Study), this was not a "self-contained unit" and "never really grew much beyond that" (Dix, 1970 : 78). Students at Columbia tended to use the facility as a "kind of home base and not as a unit intended to take care of all their needs" (Dix, 1970 : 78). Started in 1907, the College Study was an attempt on the part of the Columbia University Library administrators to help educate students for self-reliance, and to help undergraduates 'help themselves' (Cranfield, 1905 : 243 -44).

The establishment twenty-four years later in 1931 of a separate undergraduate collection at the University of Chicago in 1931 provided "satisfactory undergraduate library service", and Rebman refers to this type of library provision as the "undergraduate plan" (1981 : 331). Nevertheless, the two undergraduate collections at Columbia and Chicago remained the only undergraduate libraries in the United States for nearly twenty years (Wingate, 1978 : 29). Most of the university libraries which subsequently incorporated an undergraduate collection set aside one or two floors for its accommodation, or merely a large reading room. The result was that these undergraduate collections were not much more than a reserve book collection, or a core collection of curriculum-related books, augmented by some general reading material (Braden, 1970 : 2; Veitz, 1976 : 374).

As in the case of the large main libraries with no special undergraduate facilities, it was found that these small under-

graduate collections were beginning to become inadequate to cope with the demands placed upon them. Concern for undergraduates prompted a number of university libraries to set aside reading rooms, special collections and reserve books for undergraduates. Others organised their reader services along divisional lines into broad subject areas (Wilkinson, 1978 : 7).

It soon became apparent that the answer would have to be found in the form of separately housed undergraduate libraries. These would be "distinguished by an inviting, informal setting and ... easily accessible, providing most of the books to which the undergraduate should be exposed, items required for his course work, and general cultural material" (Veitz, 1976 : 374). Muller has even gone so far as to say that "the undergraduate library concept ... has to be considered at the very outset of the expansion phase as an essential component of the total library master plan toward which an institution is expected to move" (1970 : 114).

### 5.3.2 History of some representative undergraduate libraries in the United States.

#### 5.3.2.1 The Lamont Library at Harvard University.

The Lamont Library has been called "the prototype university facility" (Kuhn, 1970 : 2) and the "ultimate in undergraduate provision" (Moss, 1966 : 86), most probably because it was the first separately housed undergraduate library in the United States (i.e. housed in its own building separate from the main

library) (cf 5.3.1). Opened in 1949, the Lamont Library has been "one of the most well documented events in the history of American libraries" according to Wilkinson (1971 : 1568). In assessing its impact Kuhn wrote that "Design, size and location may change, but the Lamont pattern of enlarged, carefully planned and centralised undergraduate services has been a dominating influence" (1969 : 1889). In order to illustrate the importance of the Lamont Library, it is necessary to trace its development and contribution to this pioneering trend in undergraduate library provision.

In 1937 Keyes Metcalf became the Director of the Harvard University Library and Librarian of Harvard College. At the time Harvard was "experiencing severe space shortages" (cf 5.3.1) (Braden, 1970 : 5), as the Widener Library (which, as already mentioned, had been opened in 1915) was crammed to capacity, and as Metcalf himself wrote "The provision for undergraduates ... has not enabled the Library to give what has been felt to be adequate service" (1978 : 30). Moss has remarked "it is a tribute to Harvard that it was the first among the great American universities to attack this problem and that it did so ... because it wished to improve library service to undergraduates". (1966 : 86).

Metcalf "began advocating the construction of an undergraduate library" (Wingate, 1978 : 29) as he believed that with Widener "We have attempted to make it the headquarters for both graduate and undergraduate library work, and have not been altogether successful in either field. Sooner or later, I believe the

building should be devoted to one or the other" (Metcalf, 1978 : 31). Braden has noted that Metcalf "maintained that Widener could never be successfully adapted to provide undergraduate service, since it had been built as a research library and functioned best as such" (1970 : 5). Metcalf cited the fact that the Widener catalogue was extremely complex to use (cf 5.3.1), and undergraduates found using Widener "perplexing and overpowering" (Metcalf, 1978 : 31). In addition, Metcalf noted that there was inadequate provision in Widener for rare books and manuscripts, more space was needed for library staff, and storage space was required on the one hand for rarely-used books, and on the other hand for books used more frequently, but still warranting storage apart from the main book collection. Metcalf believed that a new separate undergraduate library would be "much cheaper than a new central building" (1978 : 31), although he admitted that building a new central library would have been "the conservative thing to do". However, the cost of building a new central library would have been prohibitive (approximately \$10 million at the time), the lack of a "suitable site in a central location" and the space for the accommodation required would have necessitated such a large building that it would have been unwieldly and impossible to operate from a service aspect (Wilkinson, 1971 : 1568).

In order to cope with the problem a "master plan was developed to house parts of the Harvard Library" (Wilkinson, 1978 : 41). Metcalf, the Library Council and the Administrative Board of the College met in February 1940 and unanimously voted in favour of "a special library for undergraduates" (Metcalf, 1978 : 31).

The decision to build the undergraduate library was contingent on sufficient funds being raised. However, the war years intervened and the building was postponed. After the War at a meeting of alumni, Metcalf raised the subject of the undergraduate library with one alumnus, Mr. Thomas W. Lamont, who was 'much interested'. Such was Mr. Lamont's interest that on 21 November 1954 the University was able to announce that he had donated \$1 500 000 towards the construction of an undergraduate library (Metcalf, 1978 : 35 - 6).

Meanwhile, as part of the overall plan for Harvard,, the New England Deposit Library for little-used material had opened in 1942, as had the Houghton Library for rare books and manuscripts. It was also envisaged that underground stacks in the Harvard Yard (connected by a tunnel to Widener) would provide further room for expansion in Widener. However, these underground stacks and the undergraduate library were only completed after World War II. So the Lamont Library must be considered, not as "an isolated event" (Wilkinson, 1971, 1568), but rather as part of the overall master plan to solve Harvard's problems.

Amongst the many functional requirements of the new undergraduate library given consideration by the architects, the following were considered to be pivotal to the success of the building:

- a. 'the efficiency of the ventilation system';
- b. 'the lighting';
- c. 'the sound absorption qualities of the walls and ceiling'; and
- d. 'the ease with which the students could find their books for assigned reading and obtain them' (Metcalf, 1978 : 37).



Indeed the decision on the site of the undergraduate library took into account its proximity to other library buildings and first year students dormitories "where it could be reached between classes with a minimum of time by all the students. The heaviest use of the Library has always been in the morning between classes" (Metcalf, 1978 : 37). Metcalf and the architects had consultations with a committee of the Faculty of Arts and Science and a student committee to obviate any objections to the plans. They even submitted the final plan for comment to the Committee of Librarians and Architects at Princeton (who for a number of years had been working on the ideal university library plan) (Metcalf, 1978 : 38). The plan had to take into account the three main objectives of the proposed undergraduate library, which were:

- a. 'to concentrate as far as practicable the library service for undergraduates in a central location';
- b. 'to make the books readily accessible to the students'; and
- c. 'to encourage general and recreational, as well as assigned and collateral reading' (Metcalf, 1978 : 45).

When the Lamont Library opened its doors in January 1949, it was hoped that these objectives would be met. Certainly statistics revealed a "marked increase in the use of library facilities at Harvard after the opening of the Lamont Library" (Braden, 1970 : 23). Centralization, the ready availability of books, and a general increase in undergraduate reading are assumed to have contributed to this statistical evidence. The decrease in the use of Widener in 1949 was "negligible" (Braden, 1970 : 23), but "the total for Widener and Lamont was 37 000 volumes greater than the Widener figure for 1948, when Lamont was not yet available.

In addition, 94 000 overnight charges for reserved books during 1949 represented "an increase of more than 17 000 over the preceding year, in spite of the fact that there were 500 fewer students" (McNiff & Williams, 1978 : 55 - 6).

Undergraduates were allowed to use Widener whenever material they needed was not available in Lamont. Similarly, graduate students were not precluded from using Lamont. In fact, a report prepared in 1955 by the Harvard Student Council estimated graduate use of Lamont at 20 per cent. This use of Lamont was, and still is, largely attributable to the fact that "reserve books for courses open to both graduates and undergraduates are housed in Lamont" (Braden, 1970 : 24). Graduate students teaching undergraduate courses too have recourse to the material used in these courses, and enjoyed working in the 'comfortable surroundings' which Lamont afforded them.

The decision to site the Lamont Library as close as possible to Widener (because of its proximity to the classrooms and the student dormitories) was crucial to the success of the undergraduate library. This problem was overcome by siting the undergraduate library in the Harvard Yard. Although the "building was designed from the inside out" (Braden, 1970 : 8), the architects tried to design a library whose facade would be in keeping with its surrounding buildings. Every effort was made to provide "an attractive and comfortable environment" (Rebman, 1981 : 32) and in respect of the seating arrangements Lamont hoped "to provide variety to satisfy varying student needs" (Barden , 1970 : 14. The number of seats provided totalled 1

550, which accounted for roughly 30 per cent of the current total student enrollment. (The researcher was not able to establish from the literature whether the figure of 30 per cent applied to the projected student enrollment).

It was anticipated that the book collection would eventually consist of 100 000 volumes, but initially Lamont only opened with 54 755 volumes (Braden, 1970 : 16 - 17). This collection was made up of a reserve book collection and a general reading collection. The reserve books were selected solely by members of the staff and duplicates of many of the books expected to be in great demand, were acquired. The general collection was based on books recommended by academic staff and library staff, who bore in mind their "Probable use by Harvard undergraduates" (Williams, cited in Braden, 1970 : 15). It was intended that this open access collection would be current and "could change to reflect changes in the educational needs of students at Harvard." (Rebman, 1981 : 333). At the beginning, 6 364 duplicate copies of books housed in Widener were transferred to Lamont, but as a rule no book was transferred "unless there was a duplicate of it for Widener to retain" (Williams, cited in Braden, 1970 : 15). However, if a book was required for Lamont's reserve collection and an additional copy of it could not be bought it would be transferred to Lamont automatically. As Williams has explained:

... when hundreds of undergraduates have assignments in the same book, it does little good to tell the graduate student or faculty member who needs it that Widener has a copy, for that copy, no doubt, will already be in the hands of an enterprising undergraduate (cited in Braden, 1970 : 16)

Two important sections of the general collection were the periodicals and reference books. In the case of periodicals, their selection was based on their inclusion in one of three major periodical reference tools (Poole's index, Reader's guide to periodical Literature, and International index to periodicals).

The book collection was provided on an open access basis (except for the reserve book collection), as it was hoped that this would stimulate student use. This pioneering effort on the part of Lamont reduced the demands placed on the reference service, and contributed towards making the students self-reliant (Braden, 1970 : 18). If a student's requirements had exhausted the possibilities in Lamont, the student could avail himself of the research facilities offered by Widener. A simplified classification scheme was developed so that the numbers were "brief enough for ready memorizing" (Braden, 1970 : 20). Although the Dewey Decimal Classification Scheme was used, no more than one decimal point was used in the call numbers, which resulted in the classification becoming "more a finding device than an analytical key to subject holdings" (1970 : 21). It is not surprising therefore that instruction in use of the library became largely superfluous in time, as students were able to utilize the facilities on their own.

Lamont was staffed in the beginning by "seven professional librarians, sixteen clerical employees, and a curator of the poetry room" (Braden, 1970 : 21). They were responsible in the main for the administration of the Library, as Widener performed all the technical services for Lamont. Gradually the number of

professional staff declined so that by 1970 there were only professional librarians with a total staff of 22. Over the years Lamont has experienced a high turnover of clerical staff, but this has never been a cause for concern as it is believed that they "get inefficient if they remain too long" (Braden 1970 : 22). It would seem that the "outstanding success of the self-service aspect and simplified arrangement, of the library" (Rebman, 1981 : 333) has resulted in a considerable decrease of the importance of staffing in Lamont compared to that of a general research library.

Nevertheless Braden alleged that the "overall use of the Lamont Library ... [had] been on the decline" by 1970 (1970 : 25). She imputed this to the fact that, although centralization of undergraduate services had succeeded, and Lamont was continuing to provide special services for undergraduates, it was "the division of the collection into many distinct segments ... and the proliferation of multiple copies for reserve, which ... had been extended too far" (1970 : 25). She also felt that the reserve system, the division of the book collection into three parts, and the unclassified order was far more complicated than necessary. Braden even went so far as to say that "the efforts at simplification ... backfired at Lamont" (1970 : 26). The researcher was not able to locate more recent information about the Lamont Library.

Notwithstanding the subsequent decline of Lamont, "the idea of a separate undergraduate library got the biggest boost of all by the building of the Lamont Library at Harvard" (Wilkinson, 1971 :

1568). Although it was indeed "the Lamont gift that made it possible" (Moss, 1966 : 86), "What began ... at Harvard ... has been spreading throughout the country since that time" (Orne, 1970 : 2230). According to Wilkinson the events at Harvard during the 1940s "greatly influenced several ideas which are still very much with us in the world of university libraries" i.e. the idea not only of separate undergraduate libraries, but also of separate buildings for rare books and manuscripts, storage libraries and underground libraries (1970 : 1568). Wilkinson has even compared Lamont to a shrine, with university librarians so "keenly interested in this separate approach to library service for undergraduates" that they have been prepared to make "pilgrimages" to see Lamont: "overnight Lamont became a beautiful legend" (1970 : 1568).

#### 5.3.2.2 The Undergraduate Library at the University of Michigan

There was no great rush in the United States to build separate undergraduate libraries after the opening of the Lamont Library - in fact, it took nine years before the next one was opened in that country. Although the University of Minnesota deserves the distinction of opening (in 1952) the next undergraduate library, known as the Freshman - Sophomore Library, it was only an in-house library. The honour of establishing the first full-fledged American separate undergraduate library after Lamont goes to the University of Michigan, which achieved this distinction in 1958, and as such was "Lamont's eldest son" (Wilkinson, 1971 : 1568).

The construction of the undergraduate library at Michigan had come about because of the acute space shortages not only in the general library building, but also in the "22 divisional and departmental libraries" (Wagman, 1956 : 152). William W. Bishop, the then University Librarian, had originally conceived the idea in 1945 of building a separate undergraduate library (Braden, 1970 : 29), but it was only by 1951 that it was clear to the administration of the university that "additional new facilities would have to be developed for the undergraduates" (Wagman, 1956 : 153). 1953 marked the initial planning stages for the undergraduate library, especially as Frederick H. Wagman, who had meanwhile been appointed director of the university libraries, favoured the idea of a separate undergraduate library as "the most practical answer to Michigan's pressing problem" (1956 : 154). Wagman also believed it would "give the faculty members much greater freedom to shape their courses as they should". He wisely remarked on the current situation at the University of Michigan that:

The reputation of such a university usually rests less upon the quality of its instructional program for college students than it does on the international renown achieved by its scholars and research staff. The facilities of such universities usually demand that the library maintain the quality of its research collections, even when this limits expenditures for multiple copies of books that might be useful in undergraduate instruction. As a consequence, the teaching of undergraduates frequently relies, to a far larger extent than is wise, on textbooks and canned material. The collections of such a library are huge and its catalogs are complex. The books are usually shelved compactly in stack areas to which it is unfeasible to admit the thousands of undergraduates. Moreover, large segments of the collections are dispersed among divisional and departmental libraries, which exist to make the use of books and journals more convenient to research workers, and some parts of the collections are usually in storage (Wagman, 1956 :

151).

To sum up, then, the "major reasons for proposing an undergraduate library at Michigan" were:

- a. 'the critical space shortages (in the General Library and many of the divisional libraries and the fact that some ... would eventually be move to the North Campus);' and
- b. 'the apparent change from the textbook method of instruction to the 'teaching with books', which meant that the 'new student was often confused by the complexity of the large research library' (Braden, 1970 : 29).

Planning for the undergraduate library began in 1953, but it was not opened until 18 January 1958. Known as the UGLi, the undergraduate library at the University of Michigan, it is considered by James Davis as "the prototype of most undergraduate libraries" of the 1970s (1975 : 64). It was designed purely with undergraduate use in mind. This was confirmed by Wagman when he enumerated the basic principles on which the plans were based. He noted that one such principle was that:

... everything possible should be done in the architectural planning and in the selection of books and staff to make the library inviting and easy to use; to give the students the impression that the librarians were employed to assist rather than supervise or monitor them; and to help the undergraduates develop a proprietary interest in their library (Wagman, 1978 : 122).

The undergraduate library immediately proved itself, as student reaction to it "was overwhelming and a dramatic revelation of past inadequacies" (Wagman, 1978 : 125). Its use was far



"greater than anticipated, testifying to its adequacy" (Braden, 1970 : 59). As predicted, the general library and branch libraries were "used predominantly by graduate students and faculty", which left the "reference department and the branch librarians ... more time to spend on service to faculty and graduate students and on bibliographic enterprises" (Wagman, 1978 : 127). One notable aspect was that the University of Michigan was the first state undergraduate library, and that its establishment had enjoyed the support of the State Legislature from the outset (Wagman, 1956 : 153).

The book collection was "even more accessible than ... that of Lamont" (Rebman, 1981 : 334). Most of the reserve books were put on the open shelves as it was hoped that this would stimulate undergraduates to use other books on the same topic. Only 2000 volumes were housed in the closed reserve collection and these consisted of three categories:

- a. 'out-of-print books in the Undergraduate Library for which there were not sufficient copies';
- b. 'books borrowed from other campus libraries (all out-of-print)';
- c. 'personal copies of books and other materials provided by the professors.'; and
- d. 'books placed on closed reserve when there was pressure on the use of the book or when the instructors requested it' (Braden, 1970 : 52).

The special services section of the undergraduate library was very extensive and ranged from providing rooms for the blind to group study rooms. These services were well supported and this was attributed to the centralizing of these services in a library

centrally situated on the campus and in close proximity to student classrooms.

The undergraduate library retained the cataloguing and classification codes used in the larger research library, an approach which was in contrast to the application of simplified systems at Lamont. It was hoped that by so doing the undergraduates would become familiar with these systems while the challenge of using the research library would not be too daunting a prospect. In essence, the undergraduate library was to be regarded as a 'training library' and undergraduates were trained by the staff to use the catalogue first rather than to browse. This instruction in all aspects of use of the library was given by means of orientation lectures and individual instruction. These attempts by staff to promote library usage popularized the undergraduate library enormously and contributed to its unprecedented usage by undergraduates, especially as it "served more nearly than Harvard's Lamont Library as a model for the many new undergraduate libraries built across the United States in the 1960s" (Rebman, 1981 : 334 - 5).

#### 5.3.2.3 The undergraduate library at the University of South Carolina

During the period 1950 - 1960 a few in-house undergraduate libraries opened their doors, viz. those at the University of Oklahoma, the University of Colorado, and Florida State University. The number of separately housed undergraduate libraries "continued to increase slowly during the 1950s" (Wingate, 1978 :

29), and apart from the two already discussed, the only other one of merit and significance was the undergraduate library at the University of South Carolina which opened in 1960.

Like its predecessors, (Harvard and Michigan), the University of South Carolina was experiencing "acute shortage of space" (Braden, 1970 : 63) by the mid- 1950s in its main library the McKissick Memorial Library. Braden goes on to note that the University also felt "that there was need to provide more satisfactory library facilities for undergraduate students".

The appointment of Keyes D. Metcalf, the Librarian of Harvard University, in the late 1950s as a consultant on building problems at McKissick contributed considerably to another undergraduate library being opened. True to form, Metcalf recommended that a separate undergraduate library be built. He also suggested that included in the design there should be sufficient room for storage space for little-used material. Approved by the University, the plan made provision for the seating of 600 students, for the shelving of 60 000 (later increased to 80 000) books on the open shelves, and 150 000 volumes in storage. It was basically the same design as that of Lamont Library, but considerably more attention was paid to the physical details compared with Lamont.

The size of the book collection was significantly smaller than those at Lamont and Michigan, and initially consisted of only 12 000 volumes. The reserve collection was similarly also on a much reduced scale and held only 3 000 volumes, the intention being

that these reserve books would be used intensively and for limited periods, after which they would be returned to the open shelves. The undergraduate library adopted a policy of purchasing multiple copies of certain titles, as it was hoped that such duplication would avoid the necessity of placing these titles on closed reserve. The periodical collection was restricted to fifty current titles which were mostly general in their content. By excluding back issues from the library the undergraduate library was prevented from setting itself up as a 'complete' library. The undergraduate library functioned with only two professional librarians on the staff.

Although "the concept of a special book collection for undergraduates was slow in gaining acceptance" (Wingate, 1978 : 29), the years which followed reflected a boom in the growth of undergraduate libraries.

### 5.3.3 The period of rapid growth of undergraduate libraries in the United States.

Wilkinson has called the 1960s the "New Age of the Separate Undergraduate Library", "the Golden Age of the 1960s - the Age of Higher Education" (1978 : 130 - 131). Indeed, the concept of a separate undergraduate library 'gained momentum' but in-house undergraduate libraries also gained currency, and it was not long before they too were matching the former in number.

One of the first of the long line of undergraduate libraries established in the 1960s, was the undergraduate library which

opened in 1961 at Indiana University. This undergraduate library was designed to meet seven specific needs. These were outlined as follows by Braden:

First, undergraduate students used the library to read and study their own books ... Second, about 30 per cent of undergraduate use of the library was for reading assignments in reserve books. No great change in the method of instruction was anticipated to change this situation. Third, undergraduates used the library for doing collateral reading ... Fourth, only a few students used the library for independent reading, but their reading could be encouraged if they had ready access to books ... Fifth, undergraduates used library materials for their term papers and reports. Sixth, in freshman English courses and some undergraduate library science courses, students had to prepare special projects that teach library use. Seventh, the library was a traditional meeting place for friends and small study groups (Braden, 1970 : 78).

Owing to financial difficulties it took almost eleven years before an undergraduate library at Indiana became a reality. Dr. Robert A. Miller, then director of libraries at Indiana, conceived the idea originally in 1950. However, it was only when consideration had been given to declaring the Student Building (situated in very close proximity to the main library) redundant, that the University decided to refurbish it for use as an undergraduate library. The Student Building was certainly not an ideal solution but proved a feasible alternative under the circumstances (Braden, 1970 : 78).

1962 saw the opening of an undergraduate library at Cornell , where the original main library building was retained and remodelled for use as a separate undergraduate library. As in the case of South Carolina, Keyes D Metcalf had been appointed as

a consultant, along with Frederic C. Wood, to try and relieve "the crowded conditions of the university library" (Wilkinson, 1972). In addition there was a need for "more adequate service, open access to books, a selective collection, etc." (Barden, 1970 : 93). Metcalf and Wood recommended the:

- a. Retention of the main library by conversion into an undergraduate library'; and
- b. 'the construction of a new research library which would primarily serve graduate students and faculty' (Wood, 1955 : 3 - 5).

Their proposals were accepted, and although planning began in 1956, the library development was held back owing to a lack of funds. In 1961 Cornell was fortunate to receive two donations, the larger one of which (\$1 000 000) was donated by Harold D. and Percy Uris. The chairman of the Board of Trustees, Arthur H. Dean contributed the other gift, which amounted to \$200 000. The undergraduate library was subsequently named the Uris Undergraduate Library. What was remarkable about this whole project, was that for a "total expenditure of \$1 232 192 (including \$144 375 for furnishings), Cornell University created an undergraduate library of 50 000 square feet with 1 067 seats and a book capacity of 125 000 volumes" (Wilkinson : 1972). The most notable feature in the establishment of the Uris Library was the fact that it was the first of a number of separate undergraduate libraries which were housed in renovated old main libraries, while new research libraries were built to take over the duties of the former.

The next separately housed undergraduate library to open was the

one at the University of Texas on 23 September 1963. Unlike its predecessors, the desire for an undergraduate library came not from the University Librarian, but from the Chancellor of the University and the students who petitioned for it. The new undergraduate library was to be known as the Undergraduate Library and Academic Centre, as it was expected that the "scope of the library would be broader than was ordinarily the case" (Braden, 1970 : 116). The library's book collection was intended not only to serve the "curriculum and reserve book needs of the undergraduate, but [also] to stimulate lifetime reading interests in fields outside the specific discipline of the student's major field" (Cassell, 1978 : 166). Texas was vastly influenced in its design of the undergraduate library by the one at the University of Michigan, not only because the University of Michigan Shelf List was used as a selection tool to acquire the basic bookstock at Texas, but because Frederic Wagman (the director of libraries at the University of Michigan at the time) had been appointed consultant to assist with the building plans. It has even been said that "The Michigan building and philosophy were used as guidelines in planning this building" (Thompson, 1966).

In 1965 Michigan State University and UCLA followed with the opening of their undergraduate libraries. The next year, 1966, Stanford University's Meyer Memorial library for undergraduates opened, as did one at Ohio State University.

The undergraduate library at UCLA known as the College Library was first mooted in December 1948, in response to the "pressure of increasing student enrolment and use of the library was

already beginning to be acutely felt by the library, and its complexity was beginning to interfere with service to the undergraduate students" (Mills, 1968 : 153). Initially an undergraduate library was created on the ground floor of the main library. This was superseded in 1958 when the undergraduate library and reserve book room were amalgamated into one cohesive unit known as the College Library. In 1960 the decision to build a modern new research library, with ample room for expansion of the constantly growing book collection, was taken. On completion of this research library in 1964, work started on the renovation of the old main library to convert it into a large undergraduate library - i.e. to house the college Library. Work on this phase of the project was completed in January 1966 (Mills, 1968 : 148-54). Jones has claimed that the functions of the College Library are more than just "supplying in open stacks those books which correspond directly to undergraduates' current needs and concerns" (1971 : 585). The most important function of the College Library according to Jones is its 'teaching function', whereby staff of the College Library "try to teach students to use these resources effectively, and to reach beyond them knowledgeably when they become inadequate." (1971 : 585) Jones goes on to outline some of the 'programs and activities' which are contributing to student awareness of the resources of the College Library and at the same time alerting staff to students' needs and the direct approach needed to stimulate student interest in the library (1971 : 587 - 590).

The universities of Cleveland State (1976), North Carolina and Hawaii (1963) all followed suit in opening up undergraduate



libraries. The one opened at Illinois in 1969 deserves special mention. Although Illinois had had an in-house undergraduate library from 1949, a separately housed one was first considered only in 1960. The idea of having such a separate facility in this instance was to let undergraduates use a library which was not "organized in a ... complex fashion" (White, 1968 : 1042). As with all specially designed libraries, the building took into account and made full provision for all the library needs and comforts which an undergraduate might need. So workable from a practical point of view was the undergraduate library, that in 1966 it won the Design Award Program of the United States Department of Health, Education and Welfare.

A whole spate of undergraduate libraries suddenly opened as the 1960s drew to a close, the most notable of which were those at the universities of Boston (1966), Bowling Green (1976), Cincinnati (1969) and Tennessee (1969). In 1970 alone, undergraduate libraries were opened at the universities of California at Berkeley, Emory, Wisconsin, Duke and Iowa, to be followed in 1972 by another two - those at the universities of Washington, Seattle and Maryland.

In Canada too, separate undergraduate libraries were being considered. According to Peel, Canadian universities prior to 1957 were "essentially undergraduate institutions, and their library collections reflected this level of educational interest" (1977 : 181 - 5). From 1957 onwards, students no longer had to leave Canada to further their education in the United States. Consequently "graduate and research programmes burgeoned" and

student numbers increased beyond all expectations. The period of expansion which followed in the 1960s has been called the "Golden decade of Canadian universities" (Peel), 1977 : 184), and saw four national surveys being conducted between the years 1962 and 1967 to assess the resources of Canadian university libraries. These surveys revealed that university library provision was inadequate "to support serious research work" (Peel 1977 : 190).

Despite the fact that library budgets hardly kept up with inflation, university librarians managed to almost treble the total number of volumes held at Canadian universities and colleges. The concomitant increase in student numbers meant that these university library buildings had to cope with increased demands for space. In some cases major library buildings or additions were built. In 1973 the University of British Columbia (UBC) opened the Sedgewick Undergraduate library. So original was its design and superior provision of undergraduate library facilities that Mason has predicted that it "will be a seminal influence in the design of new library buildings during the coming years" (1977 : 291). U B C as part of the TRIUL consortium (cf 2.4.2) allowed undergraduate inter-library loans which proved that such a service was needed and resulted in the provincial government funding an inter-library loan network between universities. (Thomas, 1978 : 27 - 33). Bregzis reports that in 1963 the University of Toronto received funds from the provincial government of Ontario to compile five basic collections (cf 2.4.3.3) for five new universities as part of ONULP (1965 : 495 - 508).

The seemingly endless number of undergraduate libraries which were created in North America totalled "forty-nine in 1972" although "fifty-six universities in the U S have, at one time or another, had undergraduate libraries" (Wingate, 1978 : 32). It would not be unreasonable to suppose then, that in the early 1970s undergraduate libraries were indeed the "current rage" (Wilkinson, 1971 : 1568) in the United States of America. Before examining the reasons behind their success and/or subsequent failure let us first discover what was happening elsewhere in the world.

#### 5.3.4 Undergraduate Libraries in Great Britain.

In 1966 Moss noted that the "establishment of the separate undergraduate library ... is the outcome of a variety of factors, some of which are particularly pertinent to the American university and college scene, but probably the most important of these is a long and growing awareness of the neglect of student needs in terms of book provision and library service in general" (1966 : 86). At the time of his writing the concept of the separate undergraduate library had indeed been "widely accepted" in the United States, whereas in Great Britain there was no comparable provision for undergraduates' separate reading. Growth in student numbers in the years preceding 1966 had been spectacular, and Moss was just one of a number of writers concerned with what this problem would mean to British university libraries and their users in the future.

A remarkable influence in the expansion of British university

libraries was the publication of the influential Robbins Report on Higher Education. One of the most formidable recommendations of the report was that "a target of 350 000 university places by 1980 - 81" (Committee on Higher Education, 1963 : 151 - 2) would be necessary.

Universities used the opportunity which the report afforded them, to undertake changes and improve facilities which had been long overdue. As a result of the pressures placed on these universities and the expansions asked of them, more and more were looking with "genuine interest" at the "American experiment and experience, especially at such well-established buildings as those at Harvard and Michigan" (Moss, 1966 : 112). Although MacKenna writes that the older and larger universities had already given "serious thought to the possible desirability of establishing separate undergraduate libraries", (1964 : 610) these appear to have been rather limited in number. According to Moss, "during the 1930s a number of universities had undergraduate reading rooms which were usually carrying out their own reading but not consulting library books". These rooms were normally housed in the main library, "though at Oxford and Glasgow they were separate" (1966 : 89).

The Radcliffe Camera at Oxford which was opened in 1856, was the first separate undergraduate library in Britain (Wilkinson, 1978 : 3). Although as stated earlier, the idea of a separate undergraduate library had been mooted by Thomas James of the Bodley Library at Oxford in 1608, (cf 5.3.1), "it was not until 1856 that undergraduates were permitted to study in the Bodleian

Library" (Redman, 1981 : 330). Undergraduates were allowed to enter the Radcliffe Camera but this privilege angered graduate students who were considerably put out by the invasion of undergraduates. In the 1880s a special 6 000 volume open-shelf collection was created, but had to be closed in 1894 as a result of book losses. The Radcliffe Camera was the only separately housed undergraduate library in Britain until 1939, when Glasgow University opened a Reading Room "with a collection of 13 000 volumes on closed reserve, and seats for 530 readers." (MacKenna, 1964 : 610). Bryan considers that the Glasgow Reading Room "barely qualified as an undergraduate library, as most of the books in the reading room were in closed access" (1976 : 89). One other institution, the London School of Economics, recognised the "increasing responsibilities for undergraduates ... by setting up the Teaching Library of some thirty five thousand volumes in open access, available for reference and loan" (Bryan, 1976 : 89).

In 1975 Bryan's survey of university libraries in Britain revealed that "because of their relatively small reader populations, British libraries have not developed to any extent the idea of a special undergraduate library, whether or not as part of the main building" (1976 : 65). However, Bryan asserts that these university libraries "did give evidence of enormously increased concern for the undergraduate at the service level" (1976 : 88 - 9). Norman Higham concurs, and reports that "there is scarcely a university library in Britain today that does not have a student's collection of some kind" (1976 : 211). These collections, being mostly short loan collections, are largely

comprised of "books in high demand which are temporarily sequestered from the main collections and have their use rationed and policed" (Bryan, 1976 : 90).

The University of Leeds encountered many delays before it was able to erect an undergraduate library, "where a combined provision of twenty thousand titles for reference use only and twenty five thousand copies available for loan, was being installed in open access" (Bryan, 1976 : 89). At other universities undergraduate provision was little more than a short loan collection. For example, at the University of Liverpool an Arts Reading Room was opened in 1964. Sussex too opened a "short-term collection of duplicate copies" (Tucker, 1980, 9) and was noticeably prominent amongst the "new universities" of East Anglia, Kent, Essex, Lancaster, Warwick and York, in becoming involved in undergraduate library provision. It would seem therefore that the idea of a separate undergraduate library did not quite grip the imaginations of British university librarians in the same way as it had in the United States. Indeed Bryan supports this view with his contention that "with the possible exception of the Bodleian, no British library in 1975 was providing a dedicated 'undergraduate' collection anywhere near the same size or degree of comprehensiveness as classic models such as Harvard's Lamont" (1976 : 89).

Yet, on the other side of the Atlantic the question of separately housed undergraduate libraries was undergoing re-evaluation during the 1970s.

#### 5.4 EVALUATION OF THE UNDERGRADUATE LIBRARY CONCEPT.

The establishment of most undergraduate libraries took place in what Heist has called the "theme of innovation" which permeated the educational world (1978 : 295). The types of services available at these undergraduate libraries were influenced by local conditions, financial considerations and differing concepts of what an undergraduate library should be (Braden, 1970 : 144). In Davis's opinion a number of these undergraduate libraries were established unnecessarily (1975 : 73).

The pragmatic view when assessing the value of undergraduate libraries would be to consider Knapp's standpoint that 'making the grade' is all important among undergraduate students and that if use of the library will enable them to achieve that objective, then students will make use of their library - particularly if librarians adopt an outward-looking policy and work with and through the lecturing staff (Knapp, 1971 : 221).

Referring to the vast number of students coming to university during the early 1960s, Page viewed the debate on undergraduate libraries from the perspective that many of these students are different from preceding generations of students, and are "not so much dedicated to the pursuit of knowledge in a specialized field as concerned with continuing their education for a further three years" (1978 : 350).

Before further examining the arguments of advocates and opponents of the separate undergraduate library it may be worthwhile to

look at some of the pertinent questions which librarians had to ask themselves before committing themselves to an undergraduate library. These, as summed up by Kuhn, were:.

- a. 'Is the university of sufficient size to warrant such a library? Is there a clear need?';
- b. 'Can it be located for maximum convenience to students as well as in relation to the main library collection? Should branch locations be considered?';
- c. 'If the building is to be shared, will the library function predominate? Will sharing be temporary or permanent?';
- d. 'Will space allow variety in seating patterns with maximum privacy for study stations?';
- e. 'With maximum seating and a relatively smaller collection, will the shelving arrangement still be logical for the user? Provide flexibility for changes in emphasis? Do shelving patterns enhance seating privacy and variety?'; and
- f. 'Are reserves and staff space provided for in expansion?' (Kuhn, 1969 : 206).

Generally those in favour of a separate undergraduate library maintain that the size of the main library tends to overwhelm students, a factor which causes problems in locating materials and leads to 'anti-library' sentiments on the part of students. If a separate library with special staff is provided this would improve the library 'image' and would remove "strain from the main library, allowing it to concentrate more effectively on service at a graduate level" (Davinson, 1965 : 52). Those holding the opposing view on the whole point to a 'watered down' book collection which will detract from the 'power' of a large library and will not give students the necessary "incentive to delve deeply or range widely in his chosen subject field" (Davinson, 1965 : 52).



Perhaps sensing the increasing level of criticism directed towards undergraduate libraries, several undergraduate librarians meeting at the June 1969 American Library Association convention, formed the Undergraduate Librarians (UGLI) Discussion Group and initiated the UgLi Newsletter. This interest in the undergraduate library developed into a "fervent movement" and led to the United States Office of Education funding an institute on "Training for Service in Undergraduate Libraries" Held in August, 1970. The following year another institute was held, entitled "Librarians Confront the Undergraduate Environment" sponsored by the Association of College and Research Libraries' University Libraries Section. These two institutes seemed to herald the demise of many separately housed undergraduate libraries, as the number of those in existence in the United States dropped from 49 in 1972 to 37 in 1977 (Wilkinson, 1978 : 201).

Amongst those who have questioned the validity of undergraduate libraries is Wingate. He raised the question as to whether it was a "reasonable response to establish separate libraries 'easy' enough to use" (1978 : 30). Knapp insists that when assessing the merits of undergraduate libraries the "relevance to intellectual and scholarly work rather than to undergraduate education or the undergraduate curriculum" must be stressed (1970 : 40).

"The honeymoon is over", wrote Haak (1971 : 1573). And indeed as the 1970s unfolded and a number of undergraduate collections were phased out, there was considerable disenchantment with the idea of the undergraduate library. The decline in the undergraduate

library concept is most clearly seen in the number of such libraries that closed their doors during the 1970s. Wingate notes that by 1976 there were 25 separately housed undergraduate libraries plus 15 in-house undergraduate libraries (1978 : 30), while between 1970 and 1976 "some 17 others had come and gone" (Person, 1982 : 4). By 1980 the UGLI Newsletter reports that there were 25 separately housed and 3 in-house undergraduate libraries (2982 : 1).

The reasons for the closure of these libraries were enumerated by Wingate as:

- a. 'changes in curriculum and teaching methods';
- b. 'tighter library budgets that preclude the extensive duplication of books and services required'; and
- c. 'perhaps, most importantly, the realization that a separate facility works to deprive the undergraduate of a learning experience that only a large research library can offer' (Wingate, 1978 : 33).

More detailed reasons for the closing of separate undergraduate libraries are offered by Harwood as:

- a. 'the merging of the collection of the undergraduate library with that of the main library, in order to facilitate the use of the total library collection by all students';
- b. 'budgetary considerations';
- c. 'the fact that the entire university was primarily an undergraduate institution';
- d. 'a school within the parent institution needed space'; and
- e. 'the library was primarily a dormitory library' (1983 : 6).

Harwood cites similar reasons for the closure of in-house undergraduate libraries:

- a. 'budgetary considerations';
- b. 'the undergraduate library was not an undergraduate library in the true sense';
- c. 'a trend toward increased undergraduate education of an independent nature diminished the need'; and
- d. 'the undergraduate library was too noisy' (1982 : 6).

The re-evaluation of the undergraduate library, according to Rebman, took place because of changes in education and the tightening of funds. She says that the move was toward "allowing greater freedom of choice and specialization at the undergraduate level" (1981 : 337), which meant that undergraduate student library needs became more like those of graduate students. So the need for a selective undergraduate book collection fell away. Rebman does admit that where an undergraduate library had a 'highly developed' teaching function it remained a successful undergraduate library. It remains an unsolved question as to whether in fact a sperate library service for undergraduates should be provided. Rebman seems to think that the undergraduate library "may evolve as a general library for the entire university thus it would be differentiated from the research collection not so much by who uses it but what they use it for". She also suggests that it might become "the place where new procedures and ideas in library service are introduced and tested before being adopted in other parts of the library" (1981 : 337).

In a symposium published in 1982 in the Journal of academic

librarianship entitled "University undergraduate libraries: nearly extinct or continuing examples of evolution?", Hoadley attributes the demise of the undergraduate library to bibliographic instruction which "was found to accomplish the goal originally set out for undergraduate libraries, at perhaps less cost" (1982 : 6). In reply to Hoadley, Harwood believes that "The level of commitment to teaching and learning was often the factor which determined the continuation or the closing of an undergraduate library" (1982 : 7). While in the same symposium, Laidlaw contends that the provision of separate services for undergraduates is not warranted if the library's collection is usable and explainable under one roof. However, Laidlaw claims that:

With the increasing complexity of research libraries and of the tools and services they provide, the need for a good undergraduate library whose staff is geared toward meeting the specific needs of nonspecialist undergraduates should be intensified, especially on campuses with high enrollments of both graduate and undergraduate students (1982 : 9).

The theme that permeates the discussion in the symposium is the importance of bibliographic instruction (cf 4.5.7.6). As Person states, "Some see it as the predominant reason for the existence of an undergraduate library; others view it as a service which obviates the very need for such a library" (1982 : 13). Indeed, Hammer maintains that the "true purpose of an undergraduate library is to serve as an introduction to a research library on a large campus" and that it becomes a library instruction laboratory leading students to confidently explore and use the greater information resources available to them (1982 : 12 - 13).

While the teaching mission of the undergraduate library, Phipps considers to be "more important than ever before" (1982 : 10), although bibliographic instruction, she claims, provides an alternative means of satisfying the undergraduate (1982 : 11).

Apart from Wingate (1978 : 29 -33) others who have been highly critical of undergraduate libraries are Davis (1978 : 308 - 32) and Rogers (1982 : 11 - 12). The latter believes that "We run the risk of insulting our undergraduates by limiting their special library to books that coincide with the lowest common denominator. Davis too, has criticised the creation of undergraduate libraries as "specially designed or adapted ghettos" (1978 : 310). Another opponent of the idea of separate undergraduate libraries, is McCarthy who writes that "Direct exposure to a large book collection ... is ... a valuable educational experience for the undergraduate" (1978 : 354). Indeed most critics of undergraduate libraries believe that the undergraduate "needs the intellectual stimulation of an unselected collection" (Moss, 1978 : 378), so that when they do embark on research they know how to exploit the library's holdings. Sharp maintains that by failing to encourage undergraduates to use the main library these students lose out to some extent (1955 : 31-2).

Other points to consider when examining the relative merits of the undergraduate library concept are the contention that such a library leads to spoon feeding (Keever, 1978 : 416), and that the undergraduate library has "shortchanged the university undergraduate" (Farber 1974 : 12). Wingate lends support to the arguments in support of integrated libraries for all students by

contending that it is not possible to assume that the undergraduate's reading interests and needs are as limited in scope as they used to be, and that this assumption "is probably more difficult to defend today than it was twenty years ago" (1978 : 31). This latter point of view ties in with what Keever comments on the distinction between postgraduate and undergraduate library needs being 'obsolete' largely , Keever believes, because of the method of teaching undergraduates to be more independent in their reading (1978 : 413).

In answering such objections to an undergraduate library, undergraduate librarians would counter the arguments by saying they were fully aware of the fact that undergraduates would use the facilities of the research library, and likewise that postgraduates will make use of the undergraduate library (Moss, 1978 : 379). Advocates of undergraduate libraries are agreed that only when postgraduates constitute at least a third of the total student number that an undergraduate library should be established (Braden, 1970 : 148). Laidlaw claims that when there are over 20 000 undergraduates and over 5 000 graduate students then there seems to be every reason to provide a separate undergraduate library (1982 : 11). Page has justified the establishment of a separate undergraduate library when undergraduate numbers impede the use of the main library by postgraduates (1978 : 349). Although the expansion of a university's services once it has become so overcrowded to include a separate undergraduate library has come to be viewed as "not necessarily the best answer to the problem of bigness" (O'Connell, 1973 : 273 - 282). It now seems that librarians are

no longer so certain that whenever there are problems of space shortage and accessibility of materials that the undergraduate library becomes desirable (Keever, 1978 : 416).

Despite widespread disagreement on the need for undergraduate libraries, those that remain in existence appear to still be committed to the concept. Their cohesiveness is encouraged by the stimulation of the UGLI Discussion Group's regular meetings and UGLI Newsletter.

In 1985 the UGLI Discussion Group concerned itself with the Model Statement which it was hoped would serve as a "useful and challenging guide for undergraduate libraries. The mission of the undergraduate library in the mid - 1980s is as follows:

The purpose of the undergraduate library is to take primary responsibility for meeting the library needs of undergraduate students in a large university environment. Having a separate undergraduate library designed to ensure that undergraduates receive a full and fair share of the libraries' resources - materials, services, and staff time - and do not suffer in competition with graduate students and faculty. The policies of the separate undergraduate library may frequently give preferential treatment to undergraduates to ensure this allocation of resources (UGLI Newsletter, 1985 : 2).

The researcher was not able to locate more up-to-date information in the literature on the fate of undergraduate libraries in the United States, Britain or elsewhere.

#### 5.4.1 Evaluation of the facilities offered by undergraduate libraries.

The establishment of a separate undergraduate library depends to some extent on the kind of main library building on the campus. If the physical layout and structure "can be adapted to meet the needs of the undergraduate" (Braden 1970 : 148) then there may be no need for a separate undergraduate library. At the outset of establishing an undergraduate library every effort is made to site it as closely as possible to the main university library, so that undergraduates are able to make use of the latter's research collection. When planning the type of facilities and services to be offered by an undergraduate library, consideration is given to such matters as to whether there are any branch libraries in close proximity and the extent to which these serve the undergraduate. The establishment of an undergraduate library, can in fact be viewed as the establishment of a large branch library, since Mac Carthy claims "the separate undergraduate library will provide an attractive and useful form of decentralization of the central library" (1978 : 354). As an answer to the space problems a main university library may be encountering, the cost of setting up an undergraduate library rather than a series of departmental libraries would, according to Moss, go a long way towards paying for "a much more effective library for undergraduate use". The resultant simplification and centralization of services results in greater convenience for the undergraduate user, and can in turn lead to greater use of the undergraduate library. (Moss, 1978 : 367).



In order to be successful the undergraduate library "must be inviting and stimulating" (Page, 1978 : 35)). Since the 1960s all sorts of features have been designed for the comfort and convenience of library users, such as smoking areas, typing cubicles and library furniture (cf Metcalf, 1968). Other facilities include rooms for listening to music or 'multi-purpose rooms' where seminars can be held or films shown. With these and many other numerous devices to ensure the ease and comfort of undergraduates in the accommodation provided by undergraduate libraries, it is evident that the undergraduate has been constantly born in mind during the planning stages (Page 1978 : 350).

In assessing the merits of undergraduate libraries' facilities the viability of the book collections must be examined. Critics argue that the needs of undergraduate and graduate students are not so divergent as to warrant separate book collection. The decision as to what books to incorporate into an undergraduate book collection has also raised certain reservations. However, the main opposition to separately housed undergraduate libraries has come from those who feel that students "may be led to believe that its book collection represents everything they need to read. (Moss, 1978 : 377).

The titles of the book collection of an undergraduate library are generally duplicates of the main university library. One of the advantages of duplicating much of what is held in the main university library is that academic staff cannot keep undergraduate materials out beyond the normal loan period, as "they

can use the research collection for that. (Davis, 1978 : 315). As most separate undergraduate libraries' holdings are largely made up of duplicate copies "The success of duplication depends ... on the affluence of the institution" (Braden, 1970 : 141). If funds are not available to purchase multiple copies of 'supplementary reading' books, academic staff are forced to refer mainly to prescribed works. This can mean that an undergraduate student can, and often does, graduate without ever having to go into the university library.

Budgeting for an undergraduate library is usually fairly straight forward once the rate of growth has been decided upon. Most of the books acquired for an undergraduate library would be newly published, so it would be a matter of allowing for inflation when formulating the budget. In the case of the main research library the fluctuating costs of out-of-print books, reprints and not so recent publications plays havoc with the library budget. And where there is no separate undergraduate library, the undergraduate book collection is seriously hampered by inadequate budgets and "the competing claims of research needs" (Page, 1978 : 348).

Braden's description of the book collections at some undergraduate libraries points to similar selection policies but vastly differing collections. This appears to be the result of the number of duplicate books in the existing collections and the reserve books available. The basic collection of an undergraduate library should be based on selection by the undergraduate librarian and academic staff. It is often easier to

build up a more relevant and useful book collection if academic staff actively assist in book selection, and if such staff are encouraged to take an interest in student reading, especially prior to the start of the academic year (Braden, 1970 : 153).

A number of lists were compiled over the years to aid in the selection of books for undergraduate libraries, such as the Lamont list, the University of Michigan list and the California list. More recently, there are Choice's Opening Day Collection and the second edition of Books for College Libraries, with a third edition currently being planned by the Association of College and Research Libraries" (Hardesty, 1986 : 19) (cf. 2.4.3.3). Some of the lists soon became dated and the ALA through a grant from the Council on Library Resources, established Choice. This publication was the culmination of Voigt's work in coordinating the selection of books for the undergraduate libraries of the University of California in the early 1960s. Voigt has described Choice as "the most obvious source" for book selection for undergraduate libraries (1978 : 260).

The collection, according to Keever is "The essential characteristic of the undergraduate library ... [and] book selection is of the essence in the undergraduate library" (1978 : 415). Voigt believes that academic staff must be involved in the selection of material for the undergraduate library, because by enlisting their support "the results will be ... a better collection" (1978 : 251).

In a recent study conducted by Hardesty using a semistructured interview guide, academic staff at several universities in the state of Indiana were questioned, to determine their attitudes about the types of material needed for undergraduate libraries and how those materials differed from those needed for graduate libraries. Hardesty concludes that academic staff do not have well-defined attitudes regarding the types of material appropriate for an undergraduate library, and tended to judge the usefulness of the collection on size (1986 : 22). Hardesty's research shows that "Few subjects arouse more sensitivity on the part of classroom faculty than the selection of books for the library", and he further suggests that "academic librarians need to carefully promote active discussions both between librarians and classroom faculty and among classroom faculty as to the nature of library materials that are appropriate for undergraduate students use" (1986 : 25). This discussion, Hardesty maintains should result in better understanding of the "undergraduate educational role of the academic library and, in particular, of book selection for the undergraduate library" (1986 : 25).

At some undergraduate libraries the book collection was almost complete at their inception, but it seems that there has been a tendency amongst undergraduate libraries opened in the 1970s in the United States with more limited collections, to gradually add to their bookstock in response to demand. The latter manner of collection-building would tend to result in the book collection in such undergraduate libraries corresponding much more closely with student needs and the undergraduate courses offered at the

universities, and accordingly in better utilized collections (Voigt, 1978 : 253). The introduction of new disciplines, changes in courses and innovative teaching methods require reciprocal changes to be reflected by the book stock of the undergraduate library. However, "a good undergraduate collection will be able to meet the students' needs in spite of such changes" (Voigt, 1978 : 253).

Consensus on the optimum size of the book collection has not been reached amongst the proponents of the undergraduate library. Voigt makes the purely qualitative statement that the size "should be related to purpose of the collection and should reflect experiment with use" (Voigt, 1978 : 257). Size determination also depends on whether books should be provided for all the courses for which undergraduates can register. Other aspects of size determination depend on whether undergraduates are required to do independent 'research' work and whether the needs arising from such a teaching approach will be met by the book-stock of the undergraduate library. According to Page the "size of the undergraduate collection should be adequate to give the undergraduate qua student an intelligible and attractive conspectus of the literature of each subject covered by the curriculum" (sic) (1978 : 350). The rate at which books are added to the collection of these undergraduate libraries depends on whether these libraries have established library policies determining the size of the collection.

The undergraduate library's greatest disadvantage lies in the traditional approach to libraries employed by researchers,

scholars and even librarians. The undergraduate library's "mass service" approach in providing duplicate copies, and a variety of books and periodicals on the same subject can relegate it to a "well-run supermarket" (Knapp, 1970 : 31) status. the reluctance to purchase duplicate copies of books ahead of demand, and the practice of sending periodicals off for binding at the time of their greatest usefulness all run contrary to what can be called the undergraduate library 'supply and demand' approach. The book collection in an undergraduate library can present a unique problem as it usually consists largely of "duplicate portions of the library system's holdings" (Rebman, 1975 : 391). Opponents to the idea of an undergraduate library point to the costs involved in building up such a collection and providing accommodation for it. Braden believes that although it may be more expensive because of having to duplicate staff and books, an undergraduate library "is cheap in terms of operation when compared with similar service in a general university library" (1970 : 400).

One of the most important aspects of the undergraduate library is the quality of the service provided by its staff. It is essential that undergraduate library staff are appointed who can work with academic staff, have the capacity to teach library instruction, and who can understand academic teaching requirements. The type of librarian employed by an undergraduate library may differ from the librarian working by the main university library. Staff appointed to a research library do not necessarily have the kind of personality to work "effectively with younger students" (Moss, 1966 : 365), nor may they want to. However, staff in under-

graduate libraries do not have to be young in order to relate to their users. Rather, they should be "flexible, unflappable, intelligent, and knowledgeable" (Davis, 1978 : 319).

Staffing the undergraduate library successfully is a difficult undertaking, as Davis confirms "The area of staffing is really the most critical matter involving UgLis" (1978 : 319). Haak considers that undergraduate librarians should see themselves as specialists who will assist with the development of undergraduate libraries and bring recognition to their service programmes (1970 : 22). An opposing view, is that by not having a separate undergraduate library there is a greater variety in the bookstock available, greater diversity in the facilities and services, and that the library staff of the main library has a broader subject range on which to draw and more all-round general knowledge to better assist the undergraduate. And supporting their case for not having an undergraduate library, critics suggest employing motivated staff who are keen to work with undergraduates (Mills, 1968 : 1545).

#### 5.4.2 Evaluation of the services offered by undergraduate libraries.

The services offered by an undergraduate library set it apart from the general university library. In order to evaluate the success or failure of undergraduate library services, depends on "the library's role in its particular campus environment" (Rebman, 1975 : 399). The services in most cases are unique, because, as Haak puts it, "there are services which are more

appropriate for undergraduates than for other members of the academic community "(1970 : 3) because most undergraduate libraries institute a strong programme of instruction.

Lynch has perhaps pinpointed one of the important areas of service difference in the amount of time available to the undergraduate and to the graduate researcher. She maintains that the undergraduate needs to use the library "in a very quick time frame" and undergraduate librarians "must be more sensitive than usual to this time element" (1978 : 12), whereas post-graduate students do not usually have the same kind of assignment deadlines to meet.

Service to the undergraduate is usually influenced by a number of factors, such as student numbers, and the nature of the book collection. Nevertheless the undergraduate librarian must be prepared to provide "a solid service program" (Haak, 1970 : 4), which can help bridge the gap between the librarian and the undergraduate user. It seems that the success of undergraduate libraries correlates well with "the removal of barriers between students and books" (Keever, 1978 : 417).

In recent years some undergraduate libraries have reported a drop in reference desk usage. Wilkinson in his critical look at two undergraduate libraries, namely Michigan and Cornell, attempted to evaluate their reference services (1978 : 262 - 85). He concluded that undergraduate librarians had not "taken advantage of the opportunities presented" and that most of the services had been 'superficial and too brief. Wilkinson cites the following



reasons for a decline in services:

- a. 'Librarians have a passive rather than an activist attitude. They wait for students who know little about libraries to request service';
- b. 'Librarians in undergraduate libraries rarely know any students';
- c. 'There is a total lack of communication between librarians and faculty concerning reference services for their students';
- d. 'The undergraduate libraries offer very limited and unimaginative instruction programs';
- e. 'We in universities have used the large number of students as an excuse for our failure to provide good reference services and library instruction programs'; and
- f. 'No matter how much we claim to be a profession and a part of the teaching mission of the university, too many of us settle into clerical work which requires little thought' (Wilkinson, 1978 : 233).

Wilkinson maintains that the underlying philosophy of a successful undergraduate library reference service "can usually be distilled into one word; teacher" (1978 : 266) and that the undergraduate librarian must see himself not as a purveyor of specific information (like a special librarian), but as a guide and instructor". It is essential therefore that "intelligent and sympathetic reference staff" (Moss, 1978 : 370) man the reference service in undergraduate libraries. Such staff have to introduce students to the library's various services so that they can learn the ways of the library for later unassisted use. Introducing students to the library, the reserve section, the catalogues, the circulation system and the reference section is a continuous process. Advocates of the undergraduate library are adamant that the use of the catalogue in a large research library may deter the undergraduate from using it and instead mean that the student

goes aimlessly around the shelves hoping to come across the required book 'by accident' (Moss, 1978 : 363).

In her "Guidelines for bucking the system", Knapp outlines ways in which undergraduate libraries can prove themselves invaluable within the university context. She stresses the role the undergraduate library should play as a teaching instrument (1971 : 217 - 221). Her recommendations are supported by Moss's view that "the library should be as important as the lecturer in undergraduate education" (1978 : 367). Page is even more precise when he argues that there is a need for students to have a point of departure when using the undergraduate library, and for a member of the library staff to give "guidance and stimulus" (1978 : 349). Line's research at Bath University of Technology, would seem to correlate with this, as he found that most students are traumatized and overawed by their first experience of the university library (1963 : 100 - 117).

In most undergraduate libraries "the reserve book collection is an extension of the general collection". Usually the title range of reserve books in the undergraduate library is limited, although those are in excessive demand for short periods of time. The number of reserve books in an undergraduate library is considerably less than that in a single university library system, because of the undergraduate library's duplication of bookstock, which inevitably leads to fewer reserved books (Braden, 1970 : 143).

The apparent unpreparedness of the majority of undergraduates

when entering university to cope with the resources of the large research library prompted the provision of the smaller library, i.e. the separate undergraduate library. But the undergraduate needs "someone to direct his use of the library" (Braden, 1970 : 143). In order to facilitate use of any university library the library staff must try to raise the students' abilities to the level of the library and its services. If a very general and basic method of library instructions is given, this might help obviate having an undergraduate library altogether, and "teach unprepared entering students how to use a large research library" (Wingate, 1978 : 30). In all its work the undergraduate library should "complement and support university teaching" in what Haak calls the undergraduate library's "active-service capability" (1970 : 14). This would involve teaching effective use of the library, providing a reference and reader advisory service, holding seminars, and liaising with academic staff to evaluate and improve the undergraduate teaching programmes which require students to make use of the library. It is up to the library personnel to tactfully inform the academic staff of their desire to assist them in their teaching objectives. Too often academic staff are disdainful of librarians who teach the skills of using the library. Voigt believes indeed that the success of the undergraduate library has "a direct relationship to faculty interest and to the librarian's ability to involve the faculty" (1970 : 259).

#### 5.9 Summary.

In attempting to justify establishing an undergraduate library

Knapp believes that it is essential to understand that those in authority at universities (professors, deans, etc.) place far more emphasis on research and postgraduate work than on undergraduate instruction, and by implication on the undergraduate library. The declining prestige of undergraduate teaching has prompted some educationalists to take note of what has been happening, particularly as students have become more articulate and vociferous in their demands, and realize the power of a cohesive student body when it comes to complaints against authority. Cognizance is taken of student 'staff evaluation' and this must inevitably mean that undergraduate teaching is paid greater attention. It is logical, therefore, to pre-suppose that the creation of an undergraduate library will support research rather than detract from it, and require teaching staff to be scholarly and up to date in their subject matter, and yet also remain mindful of their undergraduate teaching responsibilities (Knapp, 1970 : 21).

In examining the undergraduate library concept there were various dominant themes which were propounded by those in favour of the concept. Firstly, a separate undergraduate library building was to be provided and designed with the undergraduate in mind. Other facilities (audiovisual facilities, group study rooms, etc.) were to be provided to attract students to the library. Secondly, because the "sheer bulk of the book collection" in the main library (Moss, 1978 : 363), was a problem facing the undergraduate user, advocates of the undergraduate library wanted a collection tailored for undergraduate use. A well-rounded collection selected with the undergraduate in mind was to be

provided. The collection was also to correspond to the needs of the undergraduate curriculum. A third major theme was that the services in undergraduate libraries were to be adapted to undergraduate student needs. The type of services provided would be considerably wider than those in the main library, with staff concentrating on serving the undergraduate as opposed to providing in-depth service. The provision of a library instruction programme with the undergraduate library functioning as an instructional tool and center for instruction in library use, is another theme. In a sense the role of the library began to change to the emphasis on teaching and instructional services. Above all, the underlying theme was to simplify and centralize library services for undergraduates.

The phenomenon of the undergraduate library reached its zenith in the 1960s but "by the beginning of the eighties had declined" (Hoadley, 1982 : 5). The relevance of the concept faded as bibliographic instruction gained currency and because library budgets during the 1970s were severely strained. Institutions were forced to reconsider whether they could afford the cost of such a facility. The disadvantages of having both an undergraduate library and a main university library can result in a number of "practical difficulties including serious interference with the essential functions of each" (Moss, 1978 : 368).

Nevertheless the undergraduate library would, from all the preceding evidence, seem to be the answer to the "huge research complex which is the twentieth-century multiversity" (Keever, 1978 : 416). While not every university needs to have a separate

undergraduate library and the decision to have one would depend on the local situations it can provide an answer as an "educational mechanism" (Kuhn, 1969 : 207) and as "the intellectual centre of the undergraduate community" (Moss, 1978 : 368).

## SECTION C : EMPIRICAL SURVEY

### CHAPTER 6 : METHODOLOGY

#### 6.1 INTRODUCTION

In determining the provision of library facilities and services for undergraduate students, it was decided that having searched the literature on the topic, an empirical study of the given situation in South Africa would be undertaken (cf 6.1). The research technique or methodology applied in the empirical investigation of this thesis was chosen after all the major research methodologies were examined. A defence of the chosen methodology will be given in order to demonstrate :

... the importance of a scientific approach to research, viz. that all such investigations, whether undertaken in the speculative or mainly exact sciences, should embody the same systematic planning, accurate observation, testing and interpretation of results (Ivey, 1986 : 105).

'Methodology' which is defined as "the science of method" in the Concise Oxford dictionary refers, for the purpose of this study "to the way in which we approach problems and seek answers." (Taylor & Bogdan, 1984 : 1). Empiric in the Shorter Oxford dictionary means "based on observation or experiment, not theory". Thus empiricism is based on experience only, and disregards statements based upon anything other than evidence derived from experience. It is limited to the results of first-hand observation. Empirical studies attempt to be as precise as possible, beginning with definitions of the problem, followed by

hypotheses, controlled observations, and the measurement of variables in a hypothesis-testing procedure, and concluding with statements relating to the substantiated validity or otherwise of the tested hypotheses.

## 6.2 SCIENTIFIC ENQUIRY THEORY

"The methodology of empirical sciences has been evolved in a slow process of growth over the centuries" (De Groot, 1969 : 23). Today, in the social sciences, the scientific approach (which uses observations and the methods employed to make and analyse operations) is used to examine empirical events.

The study of the methods of empirical science is concerned with the actual procedures of investigation. Our choice of methodology according to Taylor and Bogdan is determined largely by our "assumptions, interests, and purposes" (1984 : 1). Blum and Foos too, have pointed out that "facts as well as generalizations, can be no better or meaningful than the method used to obtain them. Herein lies the most succinct difference between scientific and non-scientific data" (1986 : vii).

Scientific method differs from non-scientific method in a number of ways. Firstly, its motive is to discover the truth through objective, impartial and unbiased observation. Secondly, science seeks to be as comprehensive and as exact as possible. The usefulness of the methods of empirical research derives from their ability to maintain a truth criterion which is beyond doubt. By contrast the evaluation procedures of non-scientific



enquiry do not lend themselves as readily to establishing objectively verifiable factual statements of truth. The adherence to the rigorous demands of scientific enquiry is advantageous for library management in particular, as such enquiry provides a more valid database on which to base reliable decisions. For example, continued maintenance or a request for an extension of financial support from the institution funding a library, can be obtained by demonstrating effective financial utilization by means of a comprehensive range of quantitative and qualitative data.

Blum and Foos note that scientific methods are equally appropriate as a means of problem-solving and likewise as a part of the decision-making process. All too often, decision-making may or may not be the result of analyzing obtained data objectively. They conclude that "Too often, decisions are made without the information that data can provide" (1986 : 2).

Clearly, scientific empirical research is of interest to us because it provides a readily acceptable form of reporting an analysis of scientific thought and procedure. Experimental research nevertheless provides us with a mode for the logic of scientific enquiry which no social researcher can ignore (Brynner & Stribley, 1978 : 1).

Scientific enquiry contains two main aspects : One is the construction of theory and hypotheses and the other the discovery and validation of facts. We shall now examine each of these aspects in turn.

### 6.2.1 Theory

To some social scientists, theory means merely a thought process - a conceptualization as opposed to an empirical observation (Nachmias & Nachmias, 1976 : 9), while other social scientists view theory as a formal logico-deductive system involving a set of assumptions from which verifiable explanations and predictions can be derived (Zetterburg, 1965). According to De Groot "Literally, theory means a 'beholding', a 'view'" (1969 : 40). De Groot further defines theory as :

... a system of logically interrelated, specifically non-contradictory, statements, ideas, and concepts relating to an area of reality, formulated in such a way that testable hypotheses can be derived from them (1969 : 40).

Theory is built up from broad generalisations "which lead the researcher on to further enquiries" and "stimulates ideas about what may be in realms as yet unexplored" (Mann, 1971 : 37). Indeed theory building serves two purposes viz., to predict events or the outcome of experiments, and secondly to explain facts already recorded (Von Wright, 1971 : 1).

Ferman and Levin (1975 : 21) identify three widely used meanings of theory, viz.

- (a) theory as concept
- (b) theory as conceptual scheme, and
- (c) theory as consummation of explanation

Generally, social scientific theories take the form of "loosely

structured rationales in which the reasons for hypotheses are stated" (Ferman & Levin, 1975 : 26). Theories need to be evaluated as to whether they are worthwhile or ineffective. An effective theory would be one which facilitates the explanation of social or political phenomena. Certain theories which have a greater scope - i.e. explain a larger number of phenomena - are generally also more effective than others of a lesser scale. Similarly too, simpler theories tend to be preferable to complex theories (Ferman & Levin, 1975 : 30).

De Groot believes that theory should be regarded as "a system of propositions by which constructs are related to each other - i.e. it may be regarded as "completely divorced from reality" (1969 : 40). He also stresses the importance of theory in that it provides hypotheses which, when tested, can help to increase our knowledge in a systematic way. Nachmias and Nachmias suggest that theory be viewed as a conceptual interpretation specifying the casual nature of an empirical generalization (1976 : 12). However, Popper has denied the systematic bearing of empirical generalizations on theorizing and sees no logic in constructing theories. According to Popper, the function of the research process is to test rather than invent theories, as "whenever we try to propose a solution to a problem, we ought to try as hard as we can to overthrow our solution rather than defend it" (1961 : 16).

Theory should also be capable of generating new research and fields of enquiry. Nachmias and Nachmias likewise conclude that "empirical generalizations may generate theories, and theories

may generate researchable problems to be tested as hypotheses" (1976 : 13).

After this brief examination of the element of theory in scientific enquiry, it is necessary to examine hypotheses which are derived from theory.

#### 6.2.2 Hypotheses

"Much of the work of social science is concerned with testing hypotheses ..." (Ferman & Levin, 1975 : 23). This relationship between "theory" and "hypothesis" is best illustrated by Mann who says "The ideas which come from a good theoretical understanding are termed hypotheses ..." (1971 : 37).

De Groot supports this inter-relationship between theory and hypothesis in his statement that "scientific hypotheses seldom, if ever, stand alone; they mostly derive from, and fit in with, a framework of theories covering a whole range of phenomena" (1969 : 40). Nachmias and Nachmias also acknowledge this relationship : "Hypotheses can be derived deductively from theories" (1976 : 23). Hypotheses usually seek to "refine theory" (Mann, 1971 : 37), and must be derived from the theoretical statements made by researchers by means of deduction and specification. As a result of the researcher's investigation, hypotheses may be formulated as to the likely causes and recommendations based on these submitted to the appropriate authorities (Behr, 1983 : 90).

Hypotheses have been described by Blum and Foos as "tentative"

(1986 : 18) and by Nachmias and Nachmias as "tentative answers to research problems." (1976 : 23). This is because "their veracity can be evaluated only after they have been tested empirically" (1976 : 23). Indeed, the term hypothesis was defined by Sidney and Beatrice Webb as

... any tentative supposition, by the aid of which we endeavour to explain facts by discovering their orderliness .... Without the guidance of hypotheses we should not know what to observe, what to look for, or what experiment to make in order to discover order in routine (1932 : 60).

Hypotheses "represent our best guess about the way things are", according to Blum and Foos (1986 : 18) who argue that

Hypotheses are checked by gathering data. When enough data are gathered (no one can say exactly how much is enough) to support the hypothesis then the hypothesis is accepted as fact. Unfortunately, what we see on television or read, as well as what is (with some frequency) presented by scientists, are hypotheses with little or no supporting data. The problem is that they are presented as if they were facts (1986 : 18).

Hypotheses need to be tested, but in order to be researchable they must meet the requirements of being clear, specific and not value-bearing (i.e. the researcher's system of values has no place in the scientific enquiry method). Nachmias and Nachmias summed up hypotheses as "tentative and concrete answers to intellectual stimuli [but] ... their peculiarity consists of the possibility of rejecting them" (1976 : 27). A hypothesis is subject to acceptance or rejection - usually at a certain level of probability - and is a statement about the relationship between two or more variables. This implies that the techniques

of research can be tested.

### 6.2.3 Variables

As research design is flexible, the researcher will sooner or later encounter certain boundaries to the research in terms of the data-gathering method used. This method must meet the requirements of science by considering variables (Blum & Foos, 1986 : 11). Variables are "a useful aid towards grouping or classifying" (Miller, 1983 : 42). A variable has been defined as

A concept; but a concept which in a given research project takes on two or more values or degrees. That is to say, it is a concept that varies (Ferman & Levin, 1975 : 15).

Nachmias and Nachmias describe variables as empirically applicable concepts (1976 : 20). The choice of variable will depend on the purpose of the empirical analysis. Hellevik cautions that there should be as few variables as possible in an empirical investigation as this facilitates the creation of a "theoretical model which is more surveyable, and an empirical analysis which is more manageable" (1984 : 37).

Three types of variables have been identified as common to all forms of scientific research (Kish, 1979 : 65; Blum & Foos, 1986 : 113; Behr, 1983 : 108; Smith, 1981 : 154-55), viz independent, dependent and controlled variables.

#### 6.2.3.1 Independent Variables

Independent variables, sometimes called 'explanatory' or 'experimental' variables (Kish, 1979 : 65) are the objects of research. They are also known as 'predictor' or 'causal' variables (Busha & Harter, 1980 : 10). Independent variables are the variables the researcher wishes to find and measure for specified relationships. In choosing the independent variable the researcher manipulates the response. These varying responses become variables of the second type - dependent variables.

#### 6.2.3.2 Dependent Variables

The response to an independent variable is termed the dependent variable. It is defined by Nachmias and Nachmias as "the expected outcome of the independent variable" (1976 : 20). In other words, the independent variable is the hypothesized cause of a dependent variable.

#### 6.2.3.3 Controlled Variables

Extraneous variables which are controlled also exist as do other extraneous uncontrolled variables (Kish, 1979 : 65). The latter have been described as "confounding variables" by Blum and Foos (1986 : 11) because they interfere with the experimental procedure and/or results. A controlled variable is one in which the relationship between the independent and dependent variables is tested to see whether it is spurious or not. Thus controlled variables serve the purpose of testing the relationship observed

between the independent and dependent variables.

### 6.3 RESEARCH DESIGN

The researcher must place his research problem into a theoretical context before collecting data and analyzing the results. In this way he tries to understand the problem he wishes to study, ensuring at the same time that his research project can be linked to the existing literature on the subject. Nachmias and Nachmias enlarge on this :

Once the research objectives have been determined, the hypotheses explicated, and the variables defined, the researcher confronts the problem of constructing a research design that will enable the testing of the hypotheses (1976 : 29).

This view is supported by Ivey who asserts :

... there should be two components in research studies: a theoretical framework for the topic being investigated, and a factual or concrete foundation of evidence, which forms a solid basis to support the theory (1986 : 111).

As a result, the theoretical analysis is an important first stage in any research. In this study on library provision for undergraduate students at South African university libraries, the theoretical framework is focussed on in Chapters 2-4. The facilities and services provided for undergraduates as revealed in the literature are examined, as is the provision of separate undergraduate libraries, notably those in North America.



Once a researcher has explored the theoretical framework his next step is to develop a strategy for collecting data and testing at least one of the hypotheses that can be derived from the theory. In the second half of this study, the hypotheses as formulated in Chapter 1, are tested by an empirical study. This enquiry, which seeks to be as unprejudiced and objective as possible, attempts to make the 'object of study' (which in this case is library provision for undergraduates), reveal information that otherwise could not have been revealed.

#### 6.4 DATA

Initially the researcher decides on what he wishes to investigate; and only subsequently is he confronted with the problem of data collection. Data are obtained "when investigators record observations about the phenomena being studied or have the observations recorded for them" (Nachmias & Nachmias, 1976 : 73).

Data are facts. Data (plural) or datum (singular) is defined as "Fact[s] or information, especially as basis for inference" (The Concise Oxford dictionary (1976)). However, what are facts? The same dictionary defines facts as "Thing certainly known to have occurred or to be true, datum of experience". Thus data are facts and facts are data and are "the basis of scientific reasoning" (Blum & Foos, 1986 : 33).

A set of data are "a specifiable collection of phenomena or facts" (De Groot, 1969 : 43). Data are obtained when researchers record observations about phenomena being studied or have the

observations recorded for them (Galtung, 1969 : 9). Scientific data are measured facts (Blum & Foos, 1986 : 17) and it is up to researchers to get "the most out of the data ... collected" (Taylor & Bogdan, 1984 : 123).

Data should be collected because they are relevant and not just because they are interesting. Therefore the researcher needs to do a considerable amount of pre-planning before collecting data - knowing why he is collecting specific facts and what they are to be used for. Reliable and valid reasoning is based on reliable and valid data being obtained (Blum & Foos, 1986 : 33).

## 6.5 DATA-COLLECTION

Data-collection is the stage at which researchers make their observations and record them. The collection of data and its analysis is based on a "grand strategy of research design" (Brynnner & Stribley, 1979 : 138). There are a number of data-gathering instruments which can be used in research - the particular instrument largely depending on the nature of the investigation. Three basic forms of data-collection are generally distinguished : observational methods, interviewing and survey research, and nonreactive techniques (Nachmias & Nachmias, 1976 : 73).

### 6.5.1 Observation

Observation is one of "the 'basic tools' of social science" (Bateson, 1984 : 16) and is suitable for observing phenomena that

can be observed directly by the researcher. Observation in terms of scientific research is determined by what is observed, where and when it is observed, and how much is inferred when recording observations.

Observers follow a methodology but generally much of this evolves as they proceed with their observations and fieldwork. During the period of fieldwork, which is clearly demarcated, observers must record accurate and detailed notes with as little inference as possible (Nachmias & Nachmias, 1976 : 95). On the other hand, in participant observation the researcher attempts to establish open relationships with informants and a good rapport. This enables the researcher to merge unobtrusively with the group under investigation. The participant observer research method is inevitably loosely defined and is recorded with "a great amount of inference" (Nachmias & Nachmias, 1976 : 95).

Observation is one data-gathering technique which all researchers can use in collecting objective data. It is critical to the researcher that objectivity is attained and to this end observation "must be defined, specified, and narrowed so that the observations are recorded and reliable indicators" (Blum & Foos, 1986 : 96).

#### 6.5.2 Survey Research

Survey research constitutes a related but somewhat different investigative approach from that of the observation method. The data of direct observation produces "second-hand" knowledge,

whereas the survey method by contrast is said to produce "third-hand knowledge" (Bateson, 1984 : 20).

Various definitions of a survey have been offered. Marsh defines a survey as an investigation whereby

- (a) systematic measurements are made over a series of cases yielding a rectangle of data;
- (b) the variables in the matrix are analysed to see if they show any patterns;
- (c) the subject matter is social (1982 : 6).

A very much briefer but cryptic definition is given by Bateson, who considers a survey as "a means of knowledge production" (1984 : 10), while Miller says of surveys that they

... entail the study and comparison of a large number of objects (usually people) (Miller, 1983 : 5).

In describing surveys Ferman and Levin write of survey research :

... survey research can be regarded as retrospective, in that the effects of independent variables on dependent variables are recorded (but not manipulated) after - and sometimes long after - they have occurred (1975 : 40).

The purpose of survey research is "the understanding and/or prediction of some defined and delimited aspect of behavior" (Blum & Foos, 1986 : 255) and "to obtain data that describe ... reveal attitudes, opinions, or beliefs of a selected sample of respondents" (1986 : 264).

Survey research emphasises the need for reliability in data collection and statistical control of variables. The prime concern of survey researchers is with "the generalizability of results" both with regard to the population which the survey attempts to describe and the range of variables that are included in an investigation (Brynnner & Stribley, 1979 : 1).

Surveys not only serve as "fact-gathering procedures but also contribute to the construction and testing of theory" (Blum & Foos, 1986 : 257). To sum up, surveys which use representative samples and have unbiased findings can benefit society regardless of the academic discipline or educational background of the researcher conducting the survey.

#### 6.5.2.1 Survey Techniques

"Strictly speaking, we should talk about survey methods rather than the survey method ..." cautions Galtung (1969 : 129-30). The data-gathering technique known as survey research would include interviews and questionnaires. As Ferman and Levin point out :

The survey researcher who hopes to reconstruct casual relationships that have taken place before the study begins - usually has to rely upon the verbal reports of his respondents. These reports can be elicited by means of self-administered questionnaires or in face-to-face interviews (1975 : 42).

Whether it is an attempt to reconstruct the past, describe the present or predict the future, the questionnaire and the interview have come to dominate the collection of information.

Another major method of eliciting information is the telephone survey. Apart from being impersonal - not requiring a face-to-face interview - and less expensive than other survey techniques as contact can be made with greater frequency, their response rate is beset with problems - although call-backs are less time-consuming. Many surveys by telephone are now computer assisted (CATI - Computer Assisted Telephone Interviewing) and have a number of advantages especially as data is immediately fed into the computer for analysis. However, telephone interviews can never be completely representative as not all people have telephones. This survey method is not useful for studying the general South African population as too few households in rural areas have telephones.

A survey technique is thus any procedure through which data are systematically collected by means of some form of solicitation such as personal interviews, mailed questionnaires and telephone surveys.

#### 6.5.2.1.1 Interviews

The typical interview is "a face-to-face interpersonal role situation" (Nachmias & Nachmias, 1976 : 116). All interviews adopt a standardized format : "the researcher has the questions and the research subject has the answers" (Taylor & Bogdan, 1984 : 77).

The most common form of interview is the structured interview in which questions are determined in advance and categorized in

detail. Structured questions have definite, concrete, pre-ordained answers which are arranged in a set order in advance of the interview. Each question is followed by a set of possible answers, the subject merely indicating the one he prefers.

On the other hand, the interviewer may use an interview guide to ensure that key topics are covered in the interview which results in what is generally referred to as an unstructured interview. In addition to interview guides with non-structured questions, the interviewer is free to arrange the form and time of the enquiries. Although this allows for flexibility, there is a danger of a lack of comparability between one interviewee and another. There may however always be certain definite subject matter areas to be covered in an interview.

The principles of 'good and bad interviewing' are the basic features of social interaction which the social scientist presumes to study. Therefore a researcher must have "at least implicitly, some command of the basic theoretical features of interaction if he is to observe and interpret them to others" (Cicourel, 1964 : 68). Smith gives an excellent exposition of interviewing techniques as well as the inherent advantages and disadvantages of interviewing (1981 : 166-75). According to Smith, the greatest advantage of the interviewing technique "is its flexibility" (1981 : 168), while other important features are:

... the use of more open-ended and less structured questions, thus enabling the researcher to obtain far more interesting and in-depth answers (1981 : 168).

The interviewer can control the order in which questions are answered, thereby preventing prior knowledge from biasing certain responses (1981 : 169).

... it enables the interviewer to assess the veracity and validity of responses, and to observe and record non-verbal reactions to questions as well as any spontaneous comments (1981 : 169).

Amongst the deficiencies Smith indicates as "inherent in this data-collecting technique" (1981 : 169) are the following : It is a very time-consuming method, in so far as it is desirable not to rush interviews ...(1981 : 169).

The larger the survey, and, consequently, the more interviews and interviewers are involved, the more complicated the situation becomes (1981 : 169)

Complex and intensive interview schedules also tend to lengthen the interview (1981 : 169)

#### 6.5.2.1.2 Questionnaires

A questionnaire consists of a series of questions filled in by the respondent himself, or the researcher. It is designed to collect data from large, diverse or scattered groups of people and may be used to gather objective, quantitative or qualitative data, or both. Questionnaires may also be used in conjunction with other methods. There are a vast variety of different types of questionnaires which are distinguished in terms of their contact and structure. Firstly, there is the structured questionnaire in which questions may be asked in an open or closed form. Open questions are used by the researcher for initial exploration of a field of study and/or for intensive study. These questions are generally designed to elicit



descriptive answers. Closed format questions require predetermined answers. The structured questionnaire may be mailed or handed to the respondent for self-completion or may form part of a structured interview schedule.

The mailed questionnaire is the most widely used form of its kind. Respondents are asked to complete the questionnaires and return them through the post. Mailed questionnaires are attractive because they are cheap in terms of time and money and easy to use. They do not involve hours of interviewing or running after respondents.

Questionnaires are designed to produce "accurate communication" - so that respondents understand the survey's objectives - and "accurate responses" - so that the replies contain the information sought (Young, 1964 : 188). Questionnaires must translate the research objectives into specific questions, which, in their turn, will provide data necessary to test the hypothesis. Another purpose of a questionnaire is to assist the interviewer in motivating the respondent to communicate the required information.

In devising the questionnaire, the researcher must be concerned not only with the wording of the questions and the language used but also with the length of the questionnaire itself. Mailed questionnaires should as a rule be shorter than personally administered questionnaires - as respondents will lack the motivating influence of the interviewer to complete them. A questionnaire must be accompanied by a covering letter in order

to motivate a reply and the instructions for completing the questionnaire must be simple enough so as not to require additional oral explanation. The order of the questions should be logical and consistent, with like questions grouped together to foster a single frame of reference. There should be a sequence of ideas determined by what is called the "funnel approach" (Mann, 1968 : 137), which refers to a procedure of asking the most 'general' or the most unrestricted questions first and following them with successively more unrestricted questions. Thus in the sequence of questions the frame of reference is gradually narrowed by asking more specific questions.

The questions placed first on the questionnaire should be those easier to answer. Factual questions such as name, relationship, age, etc. often successfully serve as 'starters'. Placing a question early in the questionnaire that can affect answers to later questions should be prevented wherever possible. A time sequence should be observed in the arrangement of questions. If it is necessary to include questions relating to several periods of time on the same form, they should be so grouped that the respondent will not be forced mentally to jump from one time period to another (Young, 1964 : 188). Even the type of paper, typeface and layout used for the questionnaire are matters which must be taken into consideration (Mann, 1968 : 142-3). The visual impact of the questionnaire must not be underrated because if the respondent is put off by its length or appearance he is unlikely to start answering it. The issue of confidentiality of the data elicited, when applicable, must likewise be made clear to the respondent.

A review of questionnaire design and examples of different types of questions as well as other problems inherent in questionnaires as a research instrument are discussed in Behr (1983 : 151-161), such as non-response, falsification of answers, and resentment of interference in respondents' personal affairs.

#### 6.5.2.1.3 Scaling Techniques

Often surveys are used to collect data on opinions, background information, and information on attitudes and reasons for behaviour. Attitude measurement is done by means of scales providing for a continuum of attitudinal responses. The respondent is asked to agree or disagree with given statements along a scale of three to five or more positions within polarized opposites.

There are three techniques of scale construction - arbitrary scales, scales in which the items are determined by judges such as the Thurstone scale, and scales based on item analysis like the Likert technique. As the nature of the proposed empirical study obviated the need for attitudinal gradations in the responses, there is no purpose in discussing scaling techniques in detail. However, it was noted that worthwhile reviews of attitude scales are to be found in Goode and Halt (1952 : 235-39) and Nachmias and Nachmias (1976 : 109-116).

#### 6.5.2.2 Pilot Study

"A pilot study is a means of pre-testing the research design"

(Ivey, 1986 : 116) and is tried out in advance on a small group of subjects in the sample population.

It goes to a small sample of the real consumers for test. This is the stage of the 'dress rehearsal' or pilot (Mann, 1971 : 123).

A pilot study checks that the questions in the questionnaire are feasible for the sample to be surveyed. It is intended to exhaust all possibilities for error and to check that the range of answers is not limitless. It is also valuable for clarifying the objectives of the survey (Young, 1964 : 180).

A pilot study checks that the questionnaire does not force similar answer choices onto everyone completing the questionnaire and that the questionnaire is not beyond the group's understanding. Another benefit of the pilot stage is "in helping [with] problems of analysis" (Mann, 1971 :P 124). Response categories may need to be re-drafted but generally if

... the work done prior to the pilot has been adequate the alterations consequent upon the pilot should not be great (Mann 1971 : 124).

Needless to say, mistakes not rectified by the pilot survey are irrevocable when the survey proper is conducted.

#### 6.5.2.3 Population

One of the first problems facing a researcher is to determine the population to be surveyed. A population refers to "all those

cases about whom the statistician wants to make an estimate in respect of a certain attribute or characteristic" (Behr, 1983 : 11). Ferman and Levin define the term 'population' as:

... a set of individuals who share at least one characteristic, whether membership in a voluntary association, common citizenship, ethnicity, school enrollment, or the like (1975 : 48).

The specific nature of the population depends on the purpose of the investigation. As Taylor and Bogdan state, it "is difficult to set limits on a study. There are always more people and places to study (1984 : 66). For example, by the specification 'students' and 'enrolled in the universities in the Republic of South Africa' we define a population consisting of all students enrolled in the universities in the Republic of South Africa. The characteristics of the defined population, as well as its association with place and time, must also be included in the definition of a population (Parten, 1950 : 116).

An essential requirement of the population selected for investigation, is that it be as representative as possible of the population from which it is drawn.

The research objective is to aim for a 100 per cent response from the surveyed population - by surveyed population the writer means the population actually covered as opposed to the targeted population - as a non-response or refusal to answer can significantly affect the findings, thus introducing some bias into the results. The population is delimited not only by geographic boundaries, but also by the type and size of an

institution under examination, and by particular attributes (variables) such as qualifications, position, age and sex (Sales, 1981 : 174).

#### 6.5.2.4 Sampling

A sample is any subset of sampling units from a given population (Nachmias & Nachmias, 1976 : 258) and must be as representative as possible of the universe from which it is drawn. As a single higher degree researcher's funds and resources are invariably limited, he typically investigates only a sample which can be demonstrated as being in some way representative of a well-defined population.

The researcher attempts through the sampling process to generalize his findings - from his sample to the entire population from which the sample is drawn. Sampling procedure is based on either random or non-random sampling methods. Random sampling is applied in cases when each and every member of the population has an equal opportunity to be selected for the sample surveyed.

Sample size is important to the researcher in deciding what level of accuracy is required and therefore how large a standard error is acceptable. Likewise, it is important to ensure that non-responses do not introduce significant bias into the findings, and that the sample size be large enough to ensure an unbiased response.

### 6.5.3 Nonreactive Techniques

Nonreactive techniques of data collection would include any method that directly removes the researcher from "the set of interactions, events or behaviour being investigated" (Nachmias & Nachmias, 1976 : 120). The intention is to produce data free from the errors which the researcher or subject may intentionally or unintentionally introduce. These unobtrusive measures would include physical procedures (e.g. trace analysis, simple observation, case studies and archival records) as well as private and public (i.e. analysed with the content analysis method) techniques. These measures - as a data-gathering technique - are adequately described by Blum and Foos (1986 : 179-254), but require no further elaboration here, in view of the proposed nature of the enquiry.

## 6.6 CHOICE OF RESEARCH METHODOLOGY

The problems encountered in observing, interpreting and recording the data arise when the researcher must decide on the methodology to be used. In this study neither the observation method nor the nonreactive technique was considered suitable or appropriate. In general, the questionnaire and the interview are most often utilised, although "standardised tests, attitude scales, projective techniques, etc., are also employed" frequently (Behr, 1983 : 91). Moser and Kalton advise a combination of these methods in order to make use of their various strengths (1971 : 239).

As the scope of the study is to investigate provision of library facilities and services for undergraduates at South African university libraries, the purpose was to obtain data with a view to

- (a) identifying the kind of facilities provided,
- (b) examining the services offered, and
- (c) determining whether a separate undergraduate library would appear to be an advantage.

The research methodology chosen was determined after the population had been identified, the independent variables examined, the questionnaire technique considered, and the method of analysing the collected data decided upon. The postal questionnaire technique was chosen in conjunction with the personal interview, thereby incorporating an element of observation. The decision to use the postal questionnaire technique hinged on the fact that the survey would be exploratory and descriptive rather than analytical.

#### 6.7 CONDUCT OF THE SURVEY

In order to evaluate the theoretical provision of facilities and services for undergraduates in South Africa in this study, it was pointed out in 6.1 that there was a need for an empirical investigation. The researcher will now describe how the empirical study was carried out "to reinforce or otherwise, the theoretical principles which have been enunciated" (Ivey, 1986 : 117). The process used to collect, analyse and interpret the data collected was based on the survey research approach (cf 6.5.2). Moreover, the interview and questionnaire techniques, which have been



clearly specified in 6.5.2.1.1 and 6.5.2.1.2, were used as being particularly appropriate to this investigation.

#### 6.7.1 Population used in the Study

At first it was envisaged that all the university libraries as listed in the Directory of Southern African libraries (1982), would be surveyed. However, having considered the implications of concluding on-site visits to these libraries to complement the completion of the questionnaire, it was decided to limit the population. As the study was not intended to be a comprehensive one, nor a macrostudy, the population is made up of the three university libraries in a contiguous region of South Africa. Moreover, as this was a corporate as distinct from a personal survey, the need for sampling (including random sampling) (cf 6.5.2.4) did not arise.

The specific region surveyed in this study will not be identified so as to enable the researcher to assure each of the three institutions included in the population the measure of anonymity dictated by the terms of agreement on confidentiality and discretion.

#### 6.7.2 Profiles of the Universities

Lor has noted several characteristics of the South African university environment, most notable of which is the rapid increase in the number of institutions in the post-World War II years, and particularly over the past 25 years. At the time of

this survey there were seventeen universities (excluding the University of Transkei and the University of Bophuthatswana) - a proliferation which has caused "much duplication and unfortunate dilution of resources" (Lor, 1981 : 75).

This dilution is compounded by a tendency for almost all university departments to accept doctoral students almost as a matter of course, often regardless of whether there are adequate bibliographic resources (Lor, 1981 : 75-6).

Another characteristic has resulted from the policy of separate development as advocated by Dr H F Verwoerd (Prime Minister of South Africa, 1958-1966). This is the "fragmented control" (Lor, 1981 : 76) of the seventeen universities by four separate government departments of education. Four other universities which are technically outside South Africa's jurisdiction are controlled by the governments of the independent states of Bophuthatswana, Ciskei, Transkei and Venda, but are nevertheless "heavily dependent on South African academic resources" (Lor, 1981 : 76).

Lor refers to the geographical location of these universities and the vast distances that separate them, although there are "clusters of universities in the industrialized Pretoria-Witwatersrand-Vereeniging complex ... with minor clusters in the vicinity of Cape Town and in Natal. The other universities are fairly isolated" (1981 : 76).

Student enrollments vary from one to another and a number of universities have established "branches or satellite campuses ...

[which] makes for more complex, decentralized university library systems." (Lor, 1981 : 77).

The typology used by Lor - i.e. classifying the universities of South Africa into first, second- and third-generation and ethnic institutions (1981 : 75-82) - has been accepted by the researcher. In selecting the three universities for this study, care was taken to include in the given region surveyed, one library from each category of second- and third-generation institutions and the third from among the ethnic universities. They will be referred to anonymously as University Library A, B and C, their alphabetical sequence being totally random.

All three universities appear to subscribe to the Western model of a university in their pursuit of academic excellence. This is reflected unequivocally in their academic programmes and could be presumed to be reflected also in the collections of their university libraries. This assumption is borne out in statements made by the Vice-Chancellors of the three universities in 1983, viz.

University A: "We strive for the best quality academically ..."

University B: "... our striving for excellence"

University C: "... the pursuit of honest intellectual enterprise"

Hence, all three universities appear to follow universal standards of education.

#### 6.7.2.1 University A

As one of the five "ethnic" universities which were "designed to meet the needs of specific ethnic groups" (Lor, 1981 : 75), this semiautonomous university college became a full fledged university at the start of the 1970s. After the completion of the empirical study in 1983, the responsibility for the control and funding of the university in question by virtue of it falling in a geographic area which became part of an independent republic - has transferred to the Department of Education of this newly-created state. It has two branch campuses one of which has experienced relatively rapid growth in recent years. In 1985 all references to race were removed from this University's Act and it has therefore become what is known in current parlance as an "open" university. The majority of students at this university are from one African language speaking group although the medium of instruction is English. The university is situated in a rural town with most of the students accommodated in residences on campus. The university likes to think of itself "as a team, a family, in which every person is of importance to the successful working of the whole ...".

#### 6.7.2.2 University B

As the oldest of the three universities in the population surveyed, this university gained its autonomy from the University of South Africa during the period from 1949-1951. It is therefore a "second-generation" university (Lor, 1981 : 75). The university has one branch campus which developed quite rapidly. At the time

of the survey this was a predominantly "white" university, but has subsequently become an "open" university with a much higher percentage of black students. The medium of instruction at this university is English, and the mother tongue of the majority of students is English. Three-quarters of the student body live in university residences. The campus of the university is an integral part of the rural town in which it is located. The university's recruitment campaign stresses the emphasis given to individual recognition at the university.

#### 6.7.2.3 University C

This is one of two "third-generation" universities which "were established in response to the increasing demand for higher education among the white population in the prosperous 1960s" (Lor, 1981 : 75). It is the only dual-medium university in the country and occupies a modern, purpose-built campus in a large seaside city. It offers limited residential accommodation for its students who are mainly white. This contrasts with Universities A and B which are mainly "open" universities with increasingly higher student enrollments of 'other' population groups. The university prides itself as providing a safe investment in physical expansion, brain power and human material, and that "the future is our concern".

#### 6.7.3 Variables of the Study

As mentioned above in 6.7.1, the common element among the three university libraries that were sent the questionnaire was that

they were situated in a contiguous region. However, there were certain variables that could be identified which were, viz:

- (a) date of establishment
- (b) student enrollment
- (c) language of instruction
- (d) geographical location
- (e) government department funding the institution
- (f) ethnic composition
- (g) residential facilities
- (h) range of disciplines taught
- (i) relative predominance of undergraduate students

As respondents could have been sensitive to references to these variables and so as not to jeopardise the number of returns by possibly giving offence to the population, they were not included. Overt questions relating to these variables were therefore avoided. The researcher was also mindful of the agreement of anonymity referred to in 6.7.1.

#### 6.7.3.1 Date of Establishment

The chronological element of the date of establishment of these universities is important in as much as it has a bearing on the pace of the growth of the collections of the three university libraries. University A was founded in 1916 and only became an independent university in 1970. The forerunner of University B was established in the 19th century, although it only became an independent university in 1951.

By contrast University C was founded in 1964 during the affluent 1960s and was given a special dispensation for the development of its library. It received a premium on its normal entitlement or 'subsidy' which effectively increased this by some 17% annually from 1965 to 1980 (Financial Mail, 12 September 1986 : 32).

Both University A and University B are therefore considerably older than University C.

#### 6.7.3.2 Student Enrollment

The relatively small student registration figures at the three universities are given in Table A below. The "first-generation universities" (Lor, 1981 : 75) have significantly larger student enrollments, while those medium size student numbers are a feature of the universities of Natal and the Orange Free State, Potchefstroom University and the Rand Afrikaans University. The three universities included in this study are below these medium sized universities in terms of student enrollment, and thus are not representative of the larger type of university.

Table ATotal Student Numbers

	A	B	C
1979	2698	2809	2986
1980	3058	2914	3038
1981	2410	2982	3028
1982	3174	3201	3049
1983	2802	3293	3192
Average	2829	3040	3059

Table A reveals that the three universities have roughly comparable total student enrollment figures.

#### 6.7.3.3 Language of Instruction

University A and University B are monolingual universities where the medium of instruction is English, while bilingual instruction is a feature of University C. English is a second language for the majority of students at University A, while students whose mother-tongue is predominantly English are enrolled at University B. At University C the ratio of Afrikaans to English speaking students is fairly equal.

Students studying at University A and at University C - many of whom use English as a second language - would thus be required to read tutorial material mainly in English. This may prove a barrier to these students' success at university and account in part for the high failure rate amongst first year students at South African universities.



... of every 100 students enrolling at White residential universities only 55 eventually obtain degrees or diplomas. approximately 30 out of the original 100 do not proceed beyond the first year of study (Henderson, 1978 : 6).

In a survey conducted in 1986 by Allardice to determine the effects of campus unrest on the language proficiency of university students, the findings suggested that black university students are hampered by limited vocabulary and that the present system of schooling has resulted in such students entering university with an extremely poor command of English (1987, In Press). Proctor and Verschoor's findings

... confirmed the suspicion that Black students reach university and register for courses in English with very little reading or literary experience behind them.

... [found] that more than half of the two groups tested had read fewer than 10 works of fiction in four years prior to leaving school (1978 : 462).

The Transvaal Education Department investigating the high first-year drop out figures at universities in 1965, while attributing this amongst other things to the "toestande aan die universiteite" (1965 : 2), also emphasized the problem of

Gebrekkige leesbegrip en vermoë om geassimileerde kennis in die praktyk toe te pas;  
(By een Afrikaanstalige universiteit) : Gebrek aan geskepte voorbereiding in die gebrek van vaklektuur in Engels en vreemde tale (1965 : 3-7)

Kesting reports on this (1973 : 21-23)

In laasgenoemde verband is onlangse gegewens van bepaalde belang : 'n Onderzoek deur die MARC-werkgroep

van die nasionale Biblioteekadviesraad in 1972 het aan die lig gebring dat vyf wetenskaplike biblioteke (die van die Universiteit van Suid-Afrika, die Witwatersrandse Universiteit, die Randse Afrikaanse Universiteit, die Staatsbiblioteek en die WNNR) nagenoeg 81 persent van al hul studiemateriaal uit die VSA en Brittanje verkry en dat 'n aanvullende 13 persent studiemateriaal ook in Engels voorkom, d.w.s. die totale omvang van Engelstalige materiaal by hierdie biblioteke beloop sowat 94 persent (Lodder & Fokker, 1973 : 206-13).

The validity of Lodder and Fokker's research probably holds good for libraries elsewhere in South Africa, including the libraries at Universities A, B and C in 1983. It is interesting to note that a similar situation exists in Nigeria, where Ugonna reports "up to 90% of items acquired for the university library may originate from one foreign source or [sic] another." (1983 : 131).

#### 6.7.3.4 Geographical Location

Both universities A and B are situated in rural towns whereas University C is situated in a large city. The latter university's urban location means that it enjoys all the facilities - particularly cultural facilities - that are typically enjoyed on a larger scale by city residents. Likewise, all those things which are normally associated with rural life are enjoyed by universities A and B.

#### 6.7.3.5 Government Department Funding the Institution

University A was funded by the Department of Education and Training during the period surveyed, although as mentioned in

6.7.2.1 it has subsequently been funded by the Department of Education of an independent state. Universities B and C receive their funding from the Department of National Education. These latter two universities received their allocation according to the Van Wyk de Vries formula up until 1980 and subsequently financing of these universities by the government changed to the SAPSE (South African Post-Secondary Education) Formula. No formula applied to University A during the period surveyed. It should be noted, however, that the SAPSE Formula was introduced during 1984 at University A.

#### 6.7.3.6 Ethnic Composition

The two universities of B and C comprise mainly white students whereas A's student composition is predominantly black. A and B are 'open' universities with a high degree of other racial groups being admitted to B. Although university B and C are 'mainly white', the distinction between these two institutions is the fact that University B is an 'open' university whereas C is not.

#### 6.7.3.7 Residential Facilities

The residential facilities at University A and University B are more pronounced than at University C. Table D below illustrates this variable :

Table DStudents in Residence in 1983

A	*	B	*	C	*
2582	(92%)	1844	(56%)	835	(26%)

\* Percentage of total student enrollment (cf 5.7.3.2)

#### 6.7.3.8 Range of Disciplines Taught

The range of disciplines taught at the three universities surveyed is roughly similar in the faculties of Arts, Science, Education and Law. However, there are certain disciplines which are peculiar to each university and for which the university library at each institution has to cater. These specialised fields include the following broad disciplines at each university surveyed :

University A : Agriculture

Health Sciences - Nursing

Theology

University B : Ichthyology

Pharmacy

Theology

University C : Architecture

Health Sciences - Nursing

### 6.7.3.9 Relative predominance of Undergraduate/Post-graduate Students

Undergraduate student numbers at the three institutions surveyed are listed below in Table B, while post-graduate student numbers are listed in Table C.

Table B

#### Total Undergraduate Student Numbers

	A	B	C
1979	2555	2201	2431
1980	2884	2306	2454
1981	2279	2377	2381
1982	2922	2562	2381
1983	2523	2632	2486
Average	2633	2416	2427

Table C

#### Total Post-graduate Student Numbers

	A *	B *	C *
1979	143 (5%)	609 (22%)	555 (19%)
1980	174 (6%)	608 (21%)	584 (19%)
1981	131 (5%)	605 (20%)	647 (21%)
1982	252 (8%)	639 (20%)	668 (22%)
1983	279 (10%)	661 (20%)	706 (22%)
Average	196 (7%)	624 (20%)	632 (21%)

\* This indicates the percentage of the total enrollments for each year.

Table B shows that Universities B and C have virtually identical undergraduate student numbers. At University A the average undergraduate student number has been some 9 percent more over the five year period.

Table C reveals that University A has a significantly lower number of post-graduate students than at Universities B or C. Included in Table C are percentage figures indicating the post-graduate student numbers as a percentage of the total student enrollment for that year (cf 6.7.3.2). A higher percentage of post-graduate student numbers at Universities B and C would imply a tendency on the part of such students to use library facilities both more intensively and extensively. A high post-graduate student enrollment might place a strain on a library's ability to provide adequate bibliographic resources for such students, as Lor points out

... South African universities commonly have to support advanced degree work over a very broad front (1981 : 76)

However, if a university's student population is predominantly undergraduate this might require the library to provide multiple copies of certain books and affect the title range of the collection.

## 6.8 QUESTIONNAIRE DESIGN

The questionnaire which was prepared to collect data for the study was a structured one (cf Appendix II). The majority of

questions were closed questions. These were supplemented by some multiple-choice questions, a few open-ended questions and some dichotomous ones.

The questionnaire was very detailed and Parts 1 and 2 sought general background information on the institution's budgets and staffing situation. Part 3 gave special attention to the library collections in these libraries and involved questions on acquisitions and duplication policies. Part 4 attempted to investigate the library accommodation of these institutions. Part 5 dealt with reader services; this included eliciting data from the libraries on their orientation programmes, reference service, circulation figures and facilities. Part 6 sought general information and comments. These comments formed the final part of the data analysed.

#### 6.9 SUMMARY

As the population to be surveyed was limited to three universities, no pilot study was considered necessary by the researcher. However, the questionnaire was given to a retired University Librarian and a Professor of Sociology to peruse. Some of the questions were subsequently adjusted in the light of criticisms made concerning their perceived ambiguity of meaning and the length of the questionnaire, and several questions deleted. A discussion of the data collected follows in Chapter 7.

## CHAPTER 7 : ANALYSIS OF THE DATA

### 7.1 INTRODUCTION

This chapter will concentrate on the analysis and interpretation of the data collected through the questionnaire (cf 6.8 & Appendix 1) sent to the three university libraries which make up the total population sample of this study (cf 6.5.2.3 & 6.7.1)

As mentioned in the researcher's telephonic communication with the university librarians of all three institutions prior to mailing the questionnaire, the survey would attempt to be evaluative rather than descriptive. Library evaluation, particularly one which involves a group of libraries collectively is a formidable undertaking, especially as it may lend itself to misleading conclusions. Each library should be studied in terms of its relationship to its own institution because it was created and exists to serve a particular academic programme. The library in an evaluative survey may also be examined in terms of its relationship to other libraries of comparable size. Library standards (cf Chapter 3) have been created to provide guidelines for evaluation in order to measure the effectiveness of a specific library programme as well as designed to enable the library to attempt to assess its performance both in terms of such standards and of the level of achievement among other libraries. The ALA 1979 Standards for university libraries (cf 3.3.1) were consulted by the researcher with a view to designing the empirical study, and in particular, to constructing the questionnaire:



It was planned initially to identify the institutions concerned. Indeed, in seeking permission to identify these institutions the researcher, in the telephone conversations with the university librarians in question, emphasized the need for a collective survey of university libraries within the specified region, and that the questionnaire would deal primarily with the status of library facilities, resources and services as at the end of December 1983. It would evaluate the facilities, services and orientation programmes; and review the financial support.

However, after careful consideration, it was decided not to disclose the identity of the university libraries in this survey and also not to specify the region in which they are found (cf 6.7.1). As mentioned in 6.7.2 the three institutions are identified simply as A, B and C. The reasons for this were (a) the possibility of antagonizing the university authorities of the three libraries by divulging potentially 'sensitive' information; Line, for example, stresses that as a rule the guarantee of anonymity is important to respondents (1967:61); and (b) because withholding identity would strengthen the researcher's ability to comment more incisively on the data gathered. It is envisaged therefore, that in addition to the survey's value of providing an overview of the situation at these libraries, that its findings will prove useful in future planning or reorganization. The evaluative procedure in this study is of a two fold nature; viz. an internal comparison of the achievement ratings of the three universities and where possible, an independent assessment of each in terms of the standards of the ALA.

## 7.2 DISTRIBUTION AND RESPONSE

The questionnaire was mailed with a covering letter at the beginning of the long summer recess in 1984. One of the replies was received within six weeks, while the other two questionnaires were returned by the respondents during the course of subsequent site visits.

As mentioned above, after the questionnaires had been distributed, visits were made to the three libraries (regardless of whether or not their questionnaires had been returned). These visits provided an opportunity to clarify any problems which the respondents had encountered in completing the questionnaire. While the researcher obtained information needed for the study, ideas on library operations were also exchanged with the university librarians which yielded mutual benefits.

As the questionnaire was quite detailed and lengthy, the researcher was aware of the burden that its completion placed on the librarians and their staffs. This fact may account for the fact that one librarian mailed the answers to 7.5.1.1 and 7.5.1.1.2 two weeks after the remainder of the questionnaire had been returned, and for this reason why follow-up procedures were necessary with regard to one librarian. In addition, when visits were made to the three libraries, it was apparent that the interviews with the university librarians were extremely time-consuming for them. Nevertheless all three were cooperative and interested in allotting what time they could set aside for the interviews. In each case, after the interviews had been held,

library facilities were toured, and the library collections examined.

All three of the libraries replied to the questionnaire resulting in a 100 per cent return with the exception of two questions (viz. 7.5.3.2, and 7.5.5.7.1) all the questions were answered by the respondents. In the case of questions 7.5.3.2 and 7.5.5.7.1 the library failing to answer the question, indicated that this was because it did not have the available information to supply an answer. It is to be noted that the answers given by the university librarians were taken at face value: except in the cases where misconceptions might have intruded these were resolved by means of verbal questions at the interviews.

### 7.3 DATA PROCESSING

Sophisticated methods of statistical manipulation were not required in view of the small population used in the survey. Again, because of the population size, significance tests (Line, 1967) were not deemed necessary.

The data was arranged in such a way as to correlate with the questions asked in the questionnaire. In the analysis of the data, the data was presented in tables and given in a rather simple format because it should 'be able to speak for itself' (Ivey, 1986:133). Comments were made by the researcher below each question. It was attempted to be as concise and pertinent as possible. A summary was given at the end of every section to highlight the important points.

#### 7.4 ABBREVIATIONS

It was necessary to abbreviate some words in the questionnaire in view of the limited space available. For example the abbreviation FTE for Full-time equivalent was used in the questionnaire and listed in the glossary on page one (cf Appendix I).

#### 7.5 SURVEY DATA

Of primary importance in determining the quality of library services, resources and facilities is the extent to which funds are provided for their support. In small, developing institutions, especially where years of neglect may have taken their toll, the library budget must necessarily come under careful scrutiny in an attempt to determine whether or not adequate funds have been placed at the librarian's disposal.

In this section library funding of the three university libraries surveyed was ascertained. This was done in order to determine the degree of variation of funding among the three institutions, and with special reference to individual budget percentages devoted to the purchase of library material.

7.5.1 Finance7.5.1.1 Question: What was your total library budget in the last 5 years?

	A	B	C
1979	R213 200	R369 300	R554 000
1980	R304 600	R400 400	R664 000
1981	R320 600	R517 800	R722 000
1982	R387 400	R565 800	R818 000
1983	R468 100	R685 000	R903 000
TOTAL	R1693 900	R1921 800	R3661 000
(Average p.a.)	R 338 780	R 384 360	R 372 200

Comments

The table above shows total library expenditure rounded to the last hundred rand, for the reporting institutions between 1979-1983. As is evident from the table only one of the institutions reported expending R500 000 or more for all library purposes in 1979. By 1981, two had expended R500 000 or more. At the other extreme for 1979, one library reported a total budget of R213 200, while another claimed to have had R369 300 at its disposal. The relatively low expenditures no doubt led to inadequate staff salaries, meagre book budgets and other inadequacies.

Overall Library C emerged the more financially well off in terms of available funds. In the five year period 1979-1983, A saw a growth in its total library budget of 119,5%, B an increase of 85,4% and C a budget increase of 63%. The ratio of spending by the three universities on their libraries if compared to one another was 1: 1,1: 2,6 in 1979, whereas in 1983 this ratio was 1: 1,5: 1,9

As demonstrated in the table above, C appeared to be consistently better funded than A and B throughout the five-year period analysed.

7.5.1.1.2 Question : What percentage of your total library budget was spent on the purchase of library material in the last 5 years?

	A	B	C
1979	59%	49%	51%
1980	60%	49%	50%
1981	58%	45%	39%
1982	59%	46%	43%
1983	70%	47%	44%
Average p.a.	61%	47%	45%

Comments

A comparison of percentages spent on library material at the three institutions between 1979-1983 appears in the table above. As the table indicates, there was a significant variation in the percentage expenditures for library material among the three institutions during each year in question.

It is worth noting that university A, which in terms of its total budget significantly spent 10% more than B and 9% more than C in 1979, was spending an average of 25% more by 1983. This leads to speculation that either salaries at A had begun decreasing in relation to those of the other two university libraries, or that the number of staff had become reduced significantly in the 5 year fluctuation (cf 7.5.2).

The appendix to the ALA Standards for University Libraries (cf Chapter 3) states that "Among ARL libraries in 1966-77, expenditures for library material as a percentage of total expenditures ranged from 19,14... to 50,61 ..The vast majority... tended to spend 30 per cent of their budget on acquisitions" (1979:107). Only Library A with an annual average of 61% spent on library material, would appear to spend more on library material than the maximum of 50% laid down in the Standards.

Actual spending on library material was as follows:

Table 7.5.1.1.2.1 (in thousands)

	A	B	C
1979	R 126 491	R 180 957	R 279 770
1980	R 182 699	R 196 196	R 330 008
1981	R 186 909	R 233 010	R 283 024
1982	R 229 999	R 265 926	R 353 376
1983	R 326 593	R 321 950	R 400 029
TOTAL	R1052 691	R1198 039	R1646 207
Average p.a.	R 210 538	R 239 607	R 329 241

As shown in Table 7.5.1.1, C's funding was consistently more than A or B throughout the five-year period analysed. C retained this edge over the other two university libraries in the actual amount spent on the purchase of library material as seen in Table 7.5.1.1.2.1 although its relative percentage spent on library material was the lowest of the three.

In 1979, the highest amount allocated by any of the three libraries was R 279 770 and lowest was R 126 491, while by 1983

the highest amount was R 400 029 and the lowest R 321 950. At institutions A, B and C there were increases over the five-year period of 158%, 78% and 43% respectively. The actual amount spent on library material per student (cf 6.7.3.1 for total student numbers at A, B and C) was as follows:

Table 7.5.1.1.2.2 (nearest rand)

	A	B	C
1979	R 47	R 64	R 94
1980	R 60	R 67	R109
1981	R 72	R 78	R 93
1982	R 72	R 83	R116
1983	R117	R 97	R125
Average p.a.	R 74	R 78	R108

The lowest amount spent in 1979 was R47 per student (A) with the highest amount R94 (C). By 1983, the lowest amount spent was R97 (B) and the highest R125 (C). Parity between A and B was almost achieved with the average amount spent per student over the five-year period, viz R74 and R78 respectively, while C averaged R108 per student over the same period.

The obverse of library material is salary expenditure. If the percentage balance of the total library budget as shown in Table 7.5.1.1.2, is assumed to be spent on salaries and is expressed as a ratio of salary to material in 1983; (for example, at Library A in 1983 the ratio of expenditure on salaries to library material was 30:70 or 0,43) it would range in 1983 from 0,43 in the case of A, to 1,25 in the case of C, with an average of 0,94. Compared



with the ALA Standards the ratio of salary to material (which ranged from 3.6 to 0,8 with an average of 1,93), the three universities tended to spend a lower than average ratio on staff salaries.

#### 7.5.1.2 SUMMARY

A more detailed appraisal of the library expenditures in these institutions could have been made if the percentage of the institutions' educational and general expenditures allocated for library purposes had been requested. This was an omission on the part of the researcher which was not foreseen at the time the questionnaire was designed.

As it was deemed critical subsequently to establish what share of the gross expenditure the libraries were receiving, the gross income of the three universities under scrutiny was examined. This information on revenue was garnered from one of the universities' Vice-Chancellor's annual report for the year 1983, and the other two from the SAPSE income and expenditure statement for 1983. The percentage allocated to the three libraries were thus established post-hoc (cf. 7.5.1.1). the decision to request only the gross figure for 1983 was because the questionnaire dealt primarily with the status of each library's facilities and services at the end of 1983.

The total income for the 1983 financial year for the three universities was:

A	R16 784 433
B	R23 393 000
C	R19 164 000

In terms of the above, the total library budget for each institution amounted to a percentage of the total university budget as follows:

A	2.8%
B	2,9%
C	4,7%

Eave has cautioned in regard to determining this percentage that 'It is important to distinguish between the nett and gross budgets' of a university, advocating that 'the percentages to which the library should be entitled should be gauged against the university's nett budget' (1979:112-3) Eave also recommends that the percentage given by the state to the university for the library, should be passed on in toto (1979:177) (cf 2.6 for further discussion on this aspect of funding).

It is important to note that libraries B and C which were funded by the same department of education (cf 6.7.3.4) were consistently better funded than A despite the fact that student numbers at all three were roughly comparable (cf. 6.7.3.2). During the period 1979-80, C received a premium on its subsidy of 17% (cf 6.7.3.1) which would account in part for the significant difference in funding between C and A or B.

#### 7.5.2 STAFF

At each of the three university libraries the staffing position was investigated to determine its relative adequacy.

In all categories of staff the number of positions budgeted for was asked in addition to the number of positions filled. This was

done in order to establish whether there were any vacancies on the staffing establishments at the time of the questionnaire being distributed, and whether the libraries concerned were unable to fill such vacancies.

The definitions 'professional librariary', 'para-professional library assistant', and 'clerical assistant' were used in this section. A glossary on page one of the questionnaire defined these as follows:

- a. 'A clerical assistant' is an employee who has no library qualifications, but acts in a supportive capacity;
- b. 'A professional librarian' is an employee whose basic level of professional education has been either a four-year professionally orientated B. Bibl. degree or a non-professional Bachelor's degree plus a postgraduate diploma or its recognised equivalent as defined in the SAILIS Standards for education for library and information service; an
- c. 'A para-professional library assistant' is an employee whose basic qualification is a Lower Diploma in Library Science or its recognised equivalent as defined in the SAILIS Standards for education for library and information service. (cf 2.5 for a discussion on the staffing of university libraries).

7.5.2.1 Question : Number of FTE professional positions budgeted for on the staffing establishment, including those unfilled, over last five years?

	A	B	C
1979	6	13	13
1980	6	13	13
1981	6	13	13
1982	6	13	13
1983	6	13	13

Comments

There existed remarkable parity in the number of FTE professional positions budgeted for at libraries B and C, whereas the provision for Library A was less than half this number.

7.5.2.1.1 Question : Number of FTE professional positions filled on the staffing establishment over the last five years?

	A	B	C
1979	6	13	13
1980	6	13	13
1981	6	13	13
1982	6	13	13
1983	6	13	13

Comments

Both B and C had the same number of FTE professional positions filled, whereas A had less than half this number. The ratio of professional staff between the three institutions was 1 :2,16 : 2,16. The table reveals that there were no vacancies at all three libraries.

7.5.2.2 Question : Number of FTE para-professional library assistant positions budgeted for on the staffing establishment, including those unfilled, over last 5 years?

	A	B	C
1979	1	nil	5
1980	nil	nil	5
1981	nil	nil	5
1982	nil	nil	5
1983	nil	nil	5

Comments

The position at C as regards the number of FTE para-professional library assistant posts budgeted for, was significant in relation to those of A and B. It is worth noting that at A there was initially one post in 1979 but that this disappeared in 1980.

7.5.2.2.1 Question : Number of FTE para-professional library assistant positions filled on the staffing establishment over last 5 years?

	A	B	C
1979	1	nil	5
1980	nil	nil	5
1981	nil	nil	5
1982	nil	nil	5
1983	nil	nil	5

Comments

It is apparent that C's ability to consistently keep FTE para-professional library assistant posts filled could indicate that it was able to draw on a much larger job market than either A or B because of its urban location (cf geographic location variable 6.5.7.4). The idea of using para-professional staff at both the latter institutions did not appear to be favoured, and leads to speculation that professional staff may well have been engaged in many semi- or para-professional library tasks. It is evident from the above table that all the vacancies were filled at all three universities.

7.5.2.3 Question : Number of FTE clerical positions budgeted for on the staffing establishment, including those unfilled, over last 5 years?

	A	B	C
1979	6	7.5	10
1980	6	7.5	10
1981	6	7.5	10
1982	6	7.5	11
1983	8	7.5	11

Comments

It is of interest to note that C again leads this third category of FTE staffing positions, and that A registered an increase in 1983 of two more posts (i.e. 25%) being budgeted for.

7.5.2.3.1 Question : Number of FTE clerical positions filled on the staffing establishment over last 5 years?

	A	B	C
1979	6	7.5	10
1980	6	7.5	10
1981	6	7.5	10
1982	6	7.5	11
1983	8	7.5	11

Comments

The table shows that in this category of library personnel all the vacancies were filled at all three libraries.

7.5.2.3.2 Summary

C emerged as being clearly the better staffed of all the three university libraries. the total staff complement for each year was as follows:

	A	B	C
1979	13	20.5	28
1980	12	20.5	28
1981	12	20.5	28
1982	12	20.5	29
1983	14	20.5	29

If the total personnel for each university in 1983 is reduced to a ratio and compared to the other two institutions, the ratio is 1 : 1.46 : 2.07. It is evident from this that C was in a considerably better position staffing-wise than either A or B. The staff position at B remained constant throughout, while A dropped by one in 1980 and then increased by two in 1983. C had only a gradual increase of one post in 1982 which was sustained in 1983. Analysis revealed that there were no budgeted vacancies at any of the three libraries.

The variable of geographical location (cf 6.7.3.4) may play an important role in the ability of these libraries to ensure a ready supply of suitably qualified staff. Libraries A and B situated in rural areas might experience difficulties in attracting suitable staff, whereas C as an urban library because of its location might reasonably be expected to have less staffing problems. However, as no library had any unfilled vacancy on the staffing establishment it would appear that the



job market in each area was not saturated.

With 32 professional staff members and a total of 31,5 para-professional and clerical (5 para-professional and 26,5 clerical) staff members employed in 1983 at the three libraries, an overall ratio of 1,01 para-professional and clerical to professional staff was reflected. Libraries A, B and C indicated respectively that they preferred 1,3 : 1,7 : 1,23 para-professional and clerical staff persons for each professional staff member. Standard C.1 of the ALA Standards for university libraries (cf 3.3.1) outlines the personnel requirements of a university library but does not specify a formula for developing optimum staff size, as this varies according to the needs of the institution (1979:104). However, the appendix to the Standards states that "the overwhelming majority of libraries tended toward a pattern of one professional to two non-professionals" (1979:107). (cf 2.5 for further amplification on the staffing of university libraries). In the light of this suggested pattern of 1:2 none of the three university libraries measured up to this guideline, although the Standards do state "Local conditions dictate differing policies. A library with many branches may require a higher ratio of professionals to non-professionals" (1979:108).

7.5.2.4 Question : How many members of FTE staff are employed in Reader Services in your library?

	A	B	C
7 . 5 . 2 . 4 . 1 professional	1	4	3
7 . 5 . 2 . 4 . 2 p a r a - professional	nil	nil	3
7 . 5 . 2 . 4 . 3 clerical	5	4	4
7 . 5 . 2 . 4 . 4 other	2	nil	nil
TOTAL	8	8	10

Comments

Vuturo has stated that "Our primary function has evolved from technical services to public services" (1977:739), so in staffing this extremely important aspect of library service it is cause for real concern to discern the disparity in terms of professional reader services staff which exists between A on the one hand and the other two university libraries on the other. B maintains an equal balance between the number of professional and clerical employees in Reader Services, while C has an almost equal distribution amongst the upper two grades of posts. At Library A the university librarian and deputy are involved in processing material for the reserved book room and hence are included in the category 'other' (cf 2.2.2 & 4.4).

7.5.2.5 Question : How many members of FTE staff are employed in Technical Services in your library?

	A	B	C
7 . 5 . 2 . 5 . 1 professional	5	4	8
7 . 5 . 2 . 5 . 2 p a r a - professional	nil	nil	2
7 . 5 . 2 . 5 . 3 clerical	3	1	5
7 . 5 . 2 . 5 . 4 other	nil	nil	3
TOTAL	8	5	19

Comments

The concentration of 5 professional staff in this service side of A's library operation (as opposed to 1 professional staff member in reader services) would appear to indicate an imbalance in staff provision for reader services at this library. At B the emphasis in technical services is placed on professional staff, with only one clerical staff member assisting such staff. C has included three library management posts (cf 1.5) together with the technical services staff. If these management posts are excluded, the total number of staff employed in technical services at C is 15 which would correlate well with the 10 staff employed in reader services - a much more equitable distribution of staff between the two service areas (cf 2.2.2).

7.5.2.6 Conclusions

As the study attempted to evaluate the current adequacy of library personnel in terms of staff size, ratio of para-

professional and clerical to professional staff, it also sought to determine the staffing of the two major services areas, viz. reader services and technical services. Findings showed that the maximum number of professional staff needed in a single library was 13, while the minimum number was 6. A total of 63.5 persons were reported as being needed at the three institutions.

The number of para-professional staff reported as being employed makes for an interesting comparison. The maximum number reported employed was 5. Two libraries reported budgeting for no para-profession personnel. As regards clerical staff, the maximum number employed at one library was 16. A joint total of 31.5 para-professional and clerical staff were reported.

The conclusions which may be drawn from this section are that the staffing position at C was far stronger than that at A or B.

Indeed, from the data supplied the ability to run a university library with only 6 professional members of staff (as in the case at A) begs the question whether it is possible to provide an adequate university library service with so few professional staff. Especially with the imbalance in the number of professional staff engaged in technical processes as compared with reader services. The emphasis placed by library management in this case would appear to lie on technical services which is the opposite to the position at B; while at C the split (excluding managerial staff) between reader services and technical services is a ratio of 1 : 1,5

### 7.5.3 SCOPE AND CONTENT OF THE COLLECTION

The question of applying quantitative measures to determine the adequacy of a library's collection has been receiving increased attention in the library literature of recent years (Radcliffe, 1980:10). Many authorities are convinced that there are varying elements within the academic institution itself which must be considered before attempts are made to evaluate the library, particularly the collection. They contend that the collection must be studied in terms of its relationship to the educational programme and that the size of the collection is no yardstick in itself for measuring quality.

Verne W Clapp and Robert T Jordan (cf 2.4.3.4.1) reviewed statements made by various regional accrediting agencies in the united States concerning the evaluation of library collections (cf 2.4). They also studied the Standards for college libraries which were adopted in 1959 by the Association of College and Research Libraries of the American Library Association, and concluded that by placing weights on various collecting conditions, "it is possible to provide a meaningful quantitative measure of adequacy in library collections" (1965:371-80). While the Clapp and Jordan formula is not applied here, it must be pointed out that determining the size of collections in the libraries in this survey necessarily provides some measure of their adequacy. It is possible to have a small collection of carefully chosen volumes. However, if there has been a known history of neglect in a library, it is highly unlikely that the size of the collection will suggest adequacy. It is much more

likely that the larger collections will include a greater number of titles that relate to the academic programme of the institution than will the smaller ones (cf 2.4.3 for a summary of evaluation criteria, and Eave, 1979:24-40).

A clearly defined acquisition policy statement is useful in guiding the systematic development of a library collection (Thomas, 1985:230). Libraries which have suffered from budgetary constraints, should have careful plans for expending the funds that they do have as well as for expending funds that may be granted. Collections should develop systematically rather than in a haphazard manner, as can happen when policies and practices are undefined. Such policies should also govern all gift collections that are available to the library (Smith, 1977:72)

Library staffs, working with academic staff and students, should develop acquisition policy statements which clearly define subject areas, cross departmental lines, and determine the types of material to be collected. Such a policy helps to ensure development of the collection in a systematic manner and frequently avoids the neglect of subject areas (Millson-Martula, 1985:502) (cf 2.4.2). Eave proposed that 'If the money allocated to the library for the purchase of library materials is to be used to its maximum potential in promoting the teaching and research needs of the university, it is imperative that collection development statements be formulated for each subject area to be collected' (1979:172).

Many libraries are able to strengthen their collections through

the inclusion of significant numbers of government publications (Smith, 1977:72). Two of the respondents reported that they held government documents. Library A did not report any data on government publications, as this material was unprocessed.

Increasingly, university libraries are assuming responsibility for housing and disseminating audiovisual materials for the entire campus (Headley, 1982:5). Even when full audiovisual services are maintained elsewhere, certain nonprint materials are available in the library. Table 7.5.3.1 shows the types of nonprint materials available in the libraries surveyed, and indicates that these collections contain considerably more microforms and sound recordings than other types of nonprint media. Only one library (C) reported holdings in the form of video cassettes, filmstrips, sheet music, slides and tape units. The other libraries may well have such items in their collections but as these were uncounted did not report their holdings, and hence this was not due to an omission in the questionnaire. During the site visits to A and B, it was established that apart from sheet music which was not processed in the same way as monographs, the libraries' collection did not have items of this nature.

As all three universities are predominantly undergraduate universities (cf table B in 6.7.3.8) proportionately more of the available book funds should be spent on buying library material for undergraduate use (Gardner, 1985:144). This is necessitated by the tendency for lecturing staff to promote the 'teaching with books' method which usually results in more student usage of the

library and tends to place a much greater onus on the library to provide reading material for undergraduates. The premise that curriculum-oriented material are the ones most likely to be used by the student population has been postulated by Clarke (1977:40-50); Ehikhamenor (1983:148-61); McGrath (1971:285) and Thomas (1985:230-35). Eave is quick to point out that this view does not advocate "that the entire library budget should be devoted solely to course-related material, as the university has a wider function to play ... but these findings should be considered" (1979:39).

The reserved book collection mentioned in this section refers to a collection of library material in heavy demand by students, issued on a short loan basis (also called short loan collection). As one reliable measure of their quality, library collections could be checked frequently against various standard lists (cf 2.4.3.3), both in general and in special subjects. Among the dangers cited in using these lists, however, are that they lead to uniformity in evaluation, frequently disregarding differences in institutions; that they are soon outdated; and that they obviously omit certain titles that might be useful in a given library. nevertheless, such lists are generally prepared by experts and can be extremely useful in collection development (Hardesty, 1986:19). Examples of such lists are given in 2.4.3.3. and 5.4.1.



7.5.3.1 Question : What is the total size of your collection  
(as at the end of 1983)?

	A	B	C
7 . 5 . 2 . 1 . 1 b o o k s (monographs) vols	115 483	217 721	173 516
7 . 5 . 3 . 1 . 2 b o u n d periodical vols	28 000	77 225	50 074
7 . 5 . 3 . 1 . 3 bound vols of newspapers			
7 . 5 . 3 . 1 . 4 s o u n d recordings		12 220	2 717
7 . 5 . 3 . 1 . 5 films (units)		1	2
7 . 5 . 3 . 1 . 6 v i d e o cassettes			4
7 . 5 . 3 . 1 . 7 filmstrips			6
7 . 5 . 3 . 1 . 8 government publications (bound vols)		9 097	36 570
7 . 5 . 3 . 1 . 9 microforms (units)	55	4 525	6 798
7 . 5 . 3 . 1 . 10 pamphlets			
7 . 5 . 3 . 1 . 11 sheet music and scores (units)			7 984
7 . 5 . 3 . 1 . 12 s l i d e s & tape/slide programmes (units)		1 367	

7.5.3.1.13  
other...

7.5.3.1.14	143 538	320 789	279 038
total no of units			

#### Comments

The table above shows the total number of units processed and ready for use in the three institutions, and that the collections of all three libraries comprise monographs predominantly.

The ALA 1979 standards suggest no quantitative criteria like the 1969 ALA Standards (cf 3.3) which did suggest a correlation between the size of the student body and the size of the library collection, and which gave as a convenient measure the following formula : up to 600 students, 50 000 monograph volumes; for each additional 200 students, 10 000 volumes (Downs & Heussman, 1970:28-35) (cf 3.3). Using this formula as a guide, A (with 2 802 students) in 1983 would require a minimum of 160 100 volumes, B (3 293 students) 184 650 volumes, and C (3 192 students) 179 600 volumes. This would indicate that two of the libraries have deficiencies in the size of their monograph collection in terms of these broad quantitative criteria. The aggregate number of deficiencies in these collections equalled 22 701 monographs.

The age of the library's collection (cf 6.7.3.1) indicates the depth of the collection and C's more recent date of establishment during the affluent 1960's (1964) would have a bearing on the currency of the material available at that library, whereas both A and C were established long before this. The variable of the language of the instruction (cf 6.7.3.3) would significantly

affect the composition of material at C, which is a bilingual university. According to the university librarian of Library C, the issue of bilingualism affects the ability of the library to provide adequate material over the full range of disciplines. If a work is published in both English and Afrikaans both copies are purchased.

Another variable, viz. range of disciplines taught (cf 6.7.3.8) would also influence the composition of the collection. Each university library has certain disciplines which it emphasizes, however, the arts, sciences, education and economics curriculums are roughly similar at all three universities and the collection at each institution in these fields would contain only slight variations. In the case of A which has a very large collection of religious monographs, this would tend to distort the size of the spread of the rest of the collection amongst the various remaining disciplines.

7.5.3.2 Question : What was the total no of items held in your reserve book collection (during 1983)?

A	B	C
nil	5100	700

#### Comments

Although A does have a reserve book collection it was unable to provide precise statistics. The composition of C's reserve collection comprised 500 monographs and photocopies of journal articles and 200 cassette tapes which were used extensively during 1980 but whose usage tapered off in the early 1980's (cf 7.5.5.7.1 & 7.5.6.2).

- 7.5.3.3 Question : Outline briefly the collection development procedure for the selection of library material for students and staff indicating the respective roles of library staff, academic staff, students and other users, if any, in recommending and ultimately selecting such material?

The three libraries gave the following verbatim responses:

- A. "Recommendations are mainly made by academic staff and some Library staff to fill gaps in the collection. Students do not play a role in selection".
- B. "We encourage input from all members of the University but the vast bulk of the ordering is initiated by individual academic departments and one or two members of the University Library staff".
- C. "Library staff elicit publicity material and channel it to teaching staff who make recommendations, taking into consideration needs of academics and students. Library staff select reference books and periodicals (as far as very limited funds allow) with needs of academics and students in mind".

#### Comments

Responsibility for book selection is not equally divided between academic staff and library staff in all the three reporting libraries. Academic staff appear to have almost all of the

responsibility for book selection and follow what Eave calls the "erstwhile traditional Anglo-American approach" which leaves book selection "solely to the teaching staff" (1979:115) (cf 2.4.2). However, the ALA Standards for university libraries suggest that in developing the collection, it is imperative that librarians work closely with academic staff (1979:103).

7.5.3.3.1 Question : Does your library have a specific policy for collection development of material for undergraduate use (excluding the provision of multiple copies)?

YES          NO

A            X

B            X

C            X

#### Comments

None of the three reporting libraries indicated that they had a written collection-development policy (cf 2.4.1). The ALA Standards for university libraries suggest that a collection-development policy is essential to guide the selection and acquisition of material (1979:103). Therefore all three libraries do not meet this standard.

7.5.3.3.1.1 Question : If yes please elaborate?

The libraries responded as follows:

A. "No comment".

B. "No comment".

C. "Students are encouraged to use the whole collection and not

rely on the reserve collection only. That is why the number of titles in the reserve collection is so small".

#### Comments

As all three respondents answered "no" to question 7.5.3.3.1 there was no need to elaborate here, but it is worth noting that C emphasized that it encouraged students not to "rely on the reserve collection only".

7.5.3.3.1.2      Question : Would you consider it desirable to use as the basis for collection development one or more of the recognised lists recommended for inclusion in an undergraduate library's collection development policy?

The three libraries replied as follows:

- A.    "It is desirable to look at them and see what is suggested".
- B.    "Not desirable".
- C.    "Possibly - depending on availability of funds".

#### Comments

None of the respondents indicated that their collections had been checked against these or any other analogous lists. Only B indicated unequivocally that it considered using such lists as the basis for collection development undesirable (cf 2.4.3.3 & 5.4.1).

7.5.3.4 Question : What procedures are followed in putting an item on reserve including its selection?

The following responses were obtained:

- A. "Items are placed on reserve entirely on the basis of academic staff recommendation. They are given to the Deputy University Librarian or University Librarian who places the items on reserve".
- B. "Items are placed on reserve on the suggestions of members of the academic staff. The Circulation Librarian prepares the material and puts them on reserve. Occasionally the Library refuses to put an item on reserve if there is a clash of interests between academic departments".
- C. "Academics submit lists of books to be put on reserve. Library staff add to it from past experience".

Comments

Academic staff recommend the material for inclusion in the reserved book collection (cf 4.5.5) in all three institutions the processing is done by library staff - although in the case of Library A the University Librarian or Deputy University Librarian is involved in the processing. As a standard procedure this would seem a waste of senior management's time and expertise, and a task that could be delegated to middle and lower management.

7.5.3.5 Question : Does your library have a policy of purchasing multiple/duplicate copies of books only for undergraduate use?

	YES	NO
A.		X
B.	X	
C.		X

Comments

Written policies governing the purchase of multiple copies were not available at two of the libraries. In the case of B, duplicates are ordered from the relevant departmental accounts (cf 2.4.3.4.3).

7.5.3.5.1 Question : If yes, do you have a specific formula?

	YES	NO
A.		X
B.		X
C.		X

Comments

Despite the fact that one library has a written policy (cf 7.5.3.5) it does not have a specific formula to calculate the number of multiple copies that it purchases. (cf 2.4.3.4.3).



7.5.3.5.2 Question : If no, please comment if you so wish

The respondents replied as follows:

- a. "No comment"
- B. "We realised over the years that funds must be made available to provide multiple copies of selected books and we have been able to make such funds available. We do not purchase multiple copies of students' textbooks".
- C. "Because of limited funds, we very rarely buy multiple copies, Afrikaans literature being the one exception where we buy 3 copies of prose and 2 copies of poetry".

Comments

Library B conforms to the recommendations of the ALA Standards for university libraries that material should be readily available with the provision of multiple copies of "required and assigned readings" (1979:103). The bilingual aspect of C is manifested by its response to purchase multiple copies of Afrikaans material (cf 6.7.3.3.).

7.5.3.6 Question : Does your library have a policy of evaluating and weeding your collection systematically and on a continuing basis?

	YES	NO
A.	X	
B.	X	
C.	X	

#### Comments

The standards of the ALA and those of the various regional accrediting agencies in the United States stress the importance of weeding library collections of out-moded materials, superseded editions, superfluous duplicates, badly worn items, and so forth (Smith, 1977:81). Therefore the libraries were asked to report whether they have a policy of evaluating and weeding their collection. Only one library replied that it did have such a policy. (cf 2.4.4).

7.5.3.6.1 Question : If yes, please specify your procedures

The responding libraries replied as follows:

- A. "Not applicable".
- B. "Not applicable".
- C. "Only in connection with replacement by newer editions. Due to small collection, general weeding not yet considered".

Comments

No library commented on withdrawing bookstock. (cf 2.4.4)

7.5.3.7 SUMMARY

The library collections held jointly by the three institutions totalled 506 720 monographs, or 55 monographs per student. Findings showed a minimum shortage of 22 701 volumes in these institutions collections. Using the prevailing figure of R29 as the average cost of purchasing and processing a library book at the time of the survey (as determined from UNISA's Average Cost of Books Per Year List, 1986) these libraries would have required a combined total of R 658 329 to redress these deficiencies in their collections. At the time of writing, the average cost of a book in 1987 is R78 (UCT Library Committee. Collection development sub-committee working document, dated 15 September 1987), and assuming that this same deficit exists (although the position may have been exacerbated by recent financial problems University libraries have incurred cf 2.4.2) the amount required to redress this outstanding deficit would be R 1 770 678.

Nontraditional forms of library media have been incorporated in the collections of these libraries, although more attention has been given to the selection of microfilms, and sound recording material than to material in other forms. While the survey tried to show the actual volume count of periodicals, it made no attempt to identify which subscriptions to periodicals these libraries have, and is in retrospect a serious omission by the researcher. Although complete back runs of certain periodicals are not always required, librarians must provide back numbers in

sufficient depth to the meet the requirements of the current undergraduate programme. (ALA, 1979:103).

The contents of the reserved book collection are curriculum-based, as the three libraries have reported that academic staff select material for reserve (cf 7.5.3.4). No collection-development policy statements have been established at the three libraries. With one exception, a limited amount of weeding had been done in these three library collections.

#### 7.5.4 ACCOMMODATION

Efficient and effective library service depends as much on an adequate library facility, as it does on a well-qualified staff and a well-balanced collection of material. Attention must be given to the general condition of the building, its size, provisions for study, space for housing materials, quarters for processing and other staff activities, lighting, heating, ventilation and general atmosphere (Edwards, 1987:16-21). In this section the three libraries were requested to provide information on seating capacity and location of the collection (cf 2.3).

7.5.4.1 Question : Total seating capacity of your library?

## NO OF SEATS

A.	542
B.	356
C.	712
TOTAL	1610

Comments

SAPSE space norms require that a library be able to seat 25% of the FTE student enrollment at any given time (Riglyne, cited in Edwards, 1987:17). In 1983, all three of the libraries failed to meet this standard requiring this proportion of seating for the student body. The deficit in the total number of seats that should be available with a total of 9 287 students registered at the three institutions was 712 (cf 6.7.3 - Table A for a breakdown of students per institution).

Where there are large numbers of undergraduate students in residence (cf 6.7.3.7), as at universities A and B, then the proportion of seating accommodation needs to be higher than it is (Ugonna, 1983:128) (cf 2.3.4).

7.5.4.1.1 Please elaborate if you so wish

The three libraries responded as follows:

A. [No response]

- B. "The library is going through a phase when students are not using it to study in except for examinations. The number of seats is below 25% of the student body but it is adequate".
- C. "The second floor and half of the basement of the library building not yet used for library purposes. Eventual figure for the whole building will be more than 1000".

#### Comments

There is evidence of only one library having room for further expansion. Another library indicated that it was aware there are seating requirements for service in an academic library.

7.5.4.2 Question : Do you make specific provision for seating undergraduate students in your reserved book collection?

	YES	NO
A.	X	
B.	X	
C.	X	

#### Comments

Neither A nor B make any specific provision for seating undergraduate students in their reserved book rooms, while C does differentiate between the needs of two broad categories of student users (cf 2.3.4.1).

7.5.4.3 Question : is the reserved book collection located within the main library building?

	YES	NO
A.	X	
B.	X	
C.	X	

#### Comments

At all three university libraries the reserved book collection is housed within the Main Library building. This makes material held on reserve more readily accessible to students. However, in 7.5.4.5.1 the three libraries indicate that they do have a decentralized collection and certain material which is 'much in demand' and should conceivably be housed in the reserve section might be scattered across campus. (Braden, 1970:390)

7.5.4.3.1 Question : If yes, is it located in a separate room?

	YES	NO
A.	X	
B.	X	
C.		X

#### Comments

Two of the libraries reporting in this study maintained their reserve book collections in separate rooms. The reserved book collection is kept behind the issue desk at C. the provision of such a facility was often the forerunner to the establishment of

an undergraduate library in the United States (cf 5.3.1) (cf 4.5 for a more detailed account of the implications of a reserved book collection).

7.5.4.3.2 Question : If no, please specify where it is housed?

The libraries responded as follows:

- A. [No response]
- B. [No response]
- C. "Housed behind issue desk, near general reading room".

Comments

Maintaining reserve book collections separately is not always a wise practice, particularly where budgetary, spatial and staff problems are present. One library housed its reserved book collection issue desk with the circulation desk.

7.5.4.4 Question : When planning your library's facilities did you take into account that undergraduate students may use the library also for study purposes?

	YES	NO
A.	X	
B.	X	
C.	X	

Comments

The library should be quiet, satisfactory place to study in for



students. Provision for undergraduate study was made at only one library, perhaps because it was the most recently established (1964) of the three libraries (cf 6.7.3.1).

7.5.4.4.1 Question : please elaborate if you so wish

The responses were as follows:

- A. "Because of hostel accommodation it is essential for students to read in the library".
- A. "No comment".
- C. "The aim was to seat 25% of the student body".

Comments

Libraries should aim to provide study and reading facilities either in the library or elsewhere for every student, so the provision of other study space on a campus would relieve pressure on the library. If student residential accommodation is inadequate there will be a higher incidence of students using the library as a study hall.

7.5.4.5 Question : Does your library building house the entire collection of library material ( see question 3.1) i.e. is the collection completely centralized?

	YES	NO
A.	X	
B.	X	
C.	X	

#### Comments

All three university libraries do not have centralized collections, which is contrary to the ALA Standards for university libraries, which emphasize a preference for centralizing the collection (1979:105). Departmental libraries frequently have limited hours of opening (Geinaway, 1977:190) and this can affect access to the collection. Standards of the ALA require that students have easy access to all library materials including those housed in departmental libraries (1979:105) (cf 2.2.4).

7.5.4.5.1 Question : If no, where else are library materials housed?

	A	B	C
7.5.4.5.1.1 branch library (on campus)	X	X	
7.5.4.5.1.2 branch library (off campus)	X	X	X
7.5.4.5.1.3 departmental libraries		X	

7.5.4.5.1.4  
i n s t i t u t e  
l i b r a r i e s

X

7.5.4.5.1.5  
o t h e r (p l e a s e  
s p e c i f y)

s e m i n a r ,  
l a b o r a t o r y  
c o l l e c t i o n s

#### Comments

The older the library the more decentralized its collection may tend to be (Orne, 1970:2230). Library B is a case in point, with library material housed in a variety of locations or branch libraries. All three institutions reported having a branch library off campus. The advantages to academic staff in the event of decentralization, are convenience, rapid consultation and subject specialization (Wells, 1973:31-31) (cf 2.2.4.1). However, material kept in departmental libraries may not be as accessible to students as to staff as department libraries seldom maintain the same hours of opening as the main library (cf 2.2.4).

#### 7.5.4.5    SUMMARY

The modern trend in university libraries appears to be a move by students towards using the library for general study purposes, in addition to its more traditional purpose of providing seating for those just using the bookstock. This does not preclude the necessity of providing quiet reading areas outside the library for quiet study such as in university residences (Wilkinson, 1971:1569).

The amount of seating space in these libraries was inadequate in terms of SAPSE norms even in one of the newer facilities.

However, Library B did comment that it considered its seating provision was adequate. The decentralized collections of all three libraries imply "costly duplication in the development and maintenance of the collections" (ALA, 1979:105). In this regard none of the libraries subscribed to the concept of a centralized facility, although Library C has by far the most centralized collection of all three institutions.

#### 7.5.5 READER SERVICES

Services of these libraries include those traditionally found in libraries, although the intangible factors involved in library services make the evaluation of these services difficult. The various tasks performed by library staffs which attempt to promote library use can also be one way of gauging the measure of service given by a library.

The library orientation programme can be one of the most effective learning programmes on the campus of a university (cf 4.5.7.6.1), and can achieve a great deal if tailored to meet the real needs of students (Rhodes & Evans, 1977:16). The trend in university libraries is to provide assistance by library staff to users at all levels on how to use the library to best advantage. Undergraduate students who receive library orientation can use the library more effectively. It is imperative that libraries who offer this orientation do sufficient planning and structure the orientation programme systematically, devising a precise policy of orientation procedure. A severe limitation on the provision of library orientation or any bibliographic programme is lack of

staff and financial support.

Most university libraries provide guides or handbooks to their resources. Such publications should briefly but comprehensively provide information on the services the library offers, its rules, and the location of various sections of the library, in addition to explaining how to use the catalogue and finding books on the shelves. Moreover such a guide to the library must be simplified enough to make it comprehensible to its intended audience (cf 4.5.7.6.2).

In this section information is solicited about the rules and regulations, guides to the library, library hours, library orientation, reference services, circulation statistics and specialized facilities and services.

7.5.5.1 Question : What are the regulations governing use of your library by undergraduate students?

- A. Detailed in the University Calendar.
- B. Detailed in the University Calendar.
- C. Detailed in the University Calendar.

#### Comments

Library regulations were supplied by all three institutions (cf 4.5.3.). These regulations are laid down in the university calendars of the respective institutions, listing definitions, conditions governing use of the library, requirements for membership, details about the borrowing of material, overdue

publications, periodicals, inter-library loans, special collections and library hours. there was remarkable uniformity in the gist of the library regulations of the three institutions. However, in one case the library regulations lacked clarity. Two libraries gave briefer statements of the facilities they offer coupled with a few rules. It is recommended that the library regulations be reviewed annually to ensure that they reflect the rules as they are practiced and amended from time to time, and that cognizance is taken in redrafting these that they are always easily understandable and as informative as possible.

7.5.5.2 Question : Please give brief synopsis of your objectives in providing library service to undergraduate students

The libraries reported as follows:

- A. "No specific objectives. Same service is given for all students".
- B. "We try within the limits of available funds to provide all the books which students need for their courses - at least one copy for recommended or required reading and multiple copies where needed. We encourage the departments to devote at least a reasonable proportion to books for undergraduates".
- C. "To help and to guide students to exploit library facilities to the full. To train students to use the Library

considerately and intelligently so as to stand them in good stead for the rest of their lives. To teach students the importance of full and accurate references".

#### Comments

Two of the libraries reported that they had specific objectives in providing library service to undergraduate students (cf 4.5.7.2). Both of these libraries try to respond to the requirements of the undergraduate community by providing sufficient resources and teaching students to successfully exploit the collection. The other library reported that it had no definite objective with regard to library service to undergraduate students.

7.5.5.3 Question : Do you provide a handbook or printed guide to the Library for the use of undergraduate students?

YES

NO

A. X

B. X

C. X

#### Comments

Institutions need to make their resources more widely known through comprehensive guides which record and describe the material, facilities and services available (cf 4.5.7.6.2). Library publications are issued by two of the libraries reporting.

7.5.5.3.1 Question : If yes, please attach a copy of the guide to the library

- A. Attached
- B. Not attached
- C. Attached

Comments

Two libraries forwarded copies of their guides to the researcher. These publications were in the form of library handbooks. They served to introduce library rules and procedures to students and make their resources more widely known (cf 4.5.7.6.2).

7.5.5.4 Question : Please specify the Main Library's total number of hours of opening per week

	A	B	C
during term	71.5	72.5	72
d u r i n g u n i v e r s i t y vacations	38,75	38.5	long vac 45.5 short vac 53

Comments

Hours of service in these three institutions varied from a high of 72 hours to a low of 38.5 hours per week. However, there was a marked degree of uniformity in the three libraries term hours of opening. There was a definite pattern of reduction in library hours during university vacations by all three libraries, and by almost 50% in two cases. One library differentiated between long and short vacation periods with differing hours. Information was not solicited about lunch hours, Saturdays and public holidays.



Some measure of service can be made if attention is given to the hours of service that a library provides each week (cf 4.5.2). As the ALA Standards for university libraries are not prescriptive, they do not specify quantitatively the number of hours that a library should be open, Convenience to users should be one criteria for determining the hours of opening (ALA, 1979:105), including whether or not to remain open at lunch time. The standards state that the Library's service hours should be responsive to high- and low- use periods (1979:102).

7.5.5.4.1 Question : Please specify the Main Library's total number of hours of opening in the evening after 6pm per week

	A	B	C
during term	17.5	17.5	15
d u r i n g u n i v e r s i t y v a c a t i o n s	0	0	0

Comments

Service at night was provided in the three libraries and was relatively uniform, with the highest number of night hours reported as seventeen and a half and the lowest as fifteen. No night hours were provided during university vacations (cf 4.5.2).

6.5.5.4.2 Question : If your reserved book collection is open at different times from the Main Library's hours of opening, please specify the time schedule for its times of access

The reporting libraries reported as follows:

- A. "Open at all times the Main Library is open"
- B. "Open at every moment that the Main Library is open".
- C. [Not applicable]

#### Comments

Full access to the reserved book collection is possible at all times the three university libraries were open (cf 4.5.1).

7.5.5.5 Question : Does your library offer orientation in the use of your university library?

- |    | YES | NO |
|----|-----|----|
| A. | X   |    |
| B. |     | X  |
| C. | X   |    |

#### Comments

Two of the respondents stated that they engaged in forms of library orientation. The ALA Standards for university libraries maintain that provision should be made for bibliographic

instruction programmes (1979:102). Therefore, one library does not meet this standard (cf 4.5.7.6.1).

7.5.5.5.1 Question : Please outline your current library orientation policy and procedures for undergraduate students

- A. "Students are taken when they ask for information, in small groups to acquaint them with library procedures, services and facilities".
- B. [No response]
- C. "All first year students pay the library a visit during week preceding classes (cf 7.5.5.5.1.2). Most students come on a formal follow-up visit during first semester. Individual attention available at all times to those who require it. Brief guide to the library made available to all students.

Comments

Of the two libraries offering library orientation, one library had a haphazard arrangement for taking groups of students on library tours when requested. The other library offered an initial tour followed by a more formal, individualized visit after the commencement of lectures (cf 4.5.7.6.1).

7.5.5.5.1.2      Question : Which of the following does the library orientation consist of?

A

B

C

7.5.5.5.1.2.1  
lecture

7.5.5.5.1.2.2  
film

7.5.5.5.1.2.3  
videotape

7.5.5.5.1.2.4  
slide / tape  
presentation

7.5.5.5.1.2.5  
guided tour of  
library

X

X

7.5.5.5.1.2.6  
audiotaped  
walking tour  
of library

7.5.5.5.1.2.7  
printed self-  
guided walking  
t o u r      o f  
library

7.5.5.5.1.2.8  
other

#### Comments

Common practice at two of the libraries was a guided tour. No indication was requested of the number of students taken at a time on such a guided tour, nor of the format and content of the tour. (cf 4.5.7.6.1 - 4.5.7.6.18). In the light of recent developments in bibliographic instruction (cf 4.5.7.6.1.1), the two institutions offering tours of the library should consider augmenting their student orientation programmes with tape/slide presentations (cf 4.5.7.6.1.5) or other visual means (cf 4.5.7.6.1.3 & 4.5.7.6.1.4).

7.5.5.5.1.3      Question : If an orientation lecture is given, what information does it contain? Please give a brief synopsis

The libraries replied:

- A.    Not applicable.
- B.    Not applicable.
- C.    Not applicable.

#### Comments

As none of the three libraries surveyed, reported giving a library orientation lecture there was no response to this question. The lecture to new students should serve to welcome them and to give them an idea of the library's place in the university community (Mellon, 1986:164). Group instruction which emphasizes practical work would be even more useful than a mere lecture (cf 4.5.7.6).

7.5.5.5.1.4      Question : Which members of staff provide such library orientation?

	A	B	C
7.5.5.5.1.4.1 reference librarian(s)	X		X
7.5.5.5.1.4.2 subject librarian(s)			X
7.5.5.5.1.4.3 other (please specify)	a    1    1 professional staff		most of the senior members of library staff are involved

Comments

Orientation programmes are administered by professional staff at both institutions reporting involvement in library orientation. Selection of qualified staff for a library orientation programme must be carefully monitored, as Stevenson rightly observes "...one of the greatest problems user education faces - [are] librarians [who] are not skilled educators." (1976:18). Ideally user orientation should be co-ordinated by a senior member of staff appointed as a Reference Librarian, and charged with the responsibility for all user guidance and orientation (cf 4.5.7.8).

7.5.5.5.1.5      Question : Are there any follow-up talks on the use of the library given to undergraduate students during the rest of their undergraduate years?

YES

NO

A.                      X

B.

C.              X

Comments

As a university library is a very intricate facility it is therefore necessary for students (and staff) to have expert and professional guidance to make full use of its potential throughout their undergraduate years. Only one library arranges for follow-up talks to undergraduates, although no information has been solicited as to the form this assumes (cf 4.5.7.6.3 & 4.5.7.6.4).

7.5.5.5.1.6 Question :Do you consider your current library orientation practices adequate?

	YES	NO
A.		X
B.		X
C.	X	

#### Comments

Two of the reporting libraries feel their involvement in library orientation practices is insufficient, while one considers that its practices are adequate, and qualifies this self-assessment with the word "Fairly" next to the answer.

7.5.5.5.1.6.1 Question : If no, please comment if so desired...

The three libraries reported as follows:

- A. "Depends on funds".
- B. [No response]
- C. "Changes brought about this year need to be evaluated".

#### Comments

Any changes introduced in library orientation must be monitored for their effectiveness ((Hardesty, Lovrich & Mannon, 1979:309). One library reported that it had introduced changes which needed to be evaluated, did not mention its evaluation procedure. All three university libraries revealed during the interviews that they relied on informal evaluation - opinions, complaints,

suggestions - to elicit feedback (cf 4.5.7.10).

7.5.5.5.1.7      Question : If you have a branch library off-campus, what library orientation is given to undergraduates registered with that branch, when they visit the main library?

	A	B	C
7.5..5.5.1.7.1 S a m e a s undergraduates registered at t h e m a i n library	X		
7.5.5.5.1.7.2 None		X	
7.5.5.5.1.7.3 Other (please specify)			X

C. "Brochure available on demand".

#### Comments

Part-time students or full-time undergraduate students registered at a branch library off-campus invariably are deprived of the same service as that provided for students registered with the main campus library. Generally very little is done to introduce them to the library's facilities and services at two of the reporting libraries. At one library however, these students are treated in the same way as all undergraduates. The ALA Standards for university libraries draw attention to libraries meeting the needs of users from all other parts of the university (1979:102).



7.5.5.6 Question : Please give a rough estimate of what percentage of reference questions received from your library's users, are asked by undergraduates, as opposed to other users.

	A	B	C
1-20%			
20-50%			
More than 50%	X	X	X

#### Comments

Any reference section in a library is a major source of information and reference advice (cf 4.5.6). All three of the libraries surveyed reported that more than 50% of reference questions were asked by undergraduates. The ALA Standards for university libraries require that a reference and information service should be provided (1979:102).

7.5.5.6.1 Question : Please give a rough estimate of the percentage of reference questions asked by undergraduates of a brief informational and directional nature in each of the two categories below

	A	B	C
7.5.5.6.1.1 g e n e r a l l i b r a r y g u i d a n c e q u e s t i o n s	50	50	30
7.5.5.6.1.2 s p e c i f i c i n f o r m a t i o n q u e s t i o n s	50	50	70
TOTAL	100%	100%	100%

Comments

Reference staff must be ready at all times to assist in locating materials or set in motion literature searches. At the beginning of an academic year there are generally more questions of a general library guidance nature than for specific information. Two libraries reported that there is a 50:50 spread between the two types of questions on an annual basis. One library estimated the ratio between the two sets of questions dealt with among its undergraduate students was higher for specific information questions than the general library guidance questions (cf 4.5.6 and 4.5.6.1).

7.5.5.7 Question : Please state numbers of items circulated to all users in last 5 years (if statistics are available)

	A	B	C
1979	32 465	135 533	101 963
1980	29 467	131 776	133 160
1981	26 625	112 686	109 585
1982	20 800	115 578	101 369
1983	21 988	118 551	98 874

Comments

The extent of use of the library by academic staff and students can indicate the measure of service given in a library (cf 4.6). The table above shows circulation use of the libraries between 1979 and 1983. While per capita circulation figures were not requested (and may not have been available), the table indicates some fluctuation in the use of material at each of the three libraries. It must be considered that statistics on use may be suspect, for they generally disregard items used from open

shelves. Nevertheless, these statistics do provide some measure of the extent to which library material is used. Furthermore, as is evident from the table above, use of library material tended to fluctuate at all three of the institutions.

In view of the low number of professional staff employed at library A (6 professional staff) it is interesting to note here that Braden established a definite possibility of a correlation between a reduced number of staff and a "decline in use of the library" (1970:398) (cf the staffing establishments of the three libraries reported earlier in 7.5.2).

7.5.5.7.1 Question : Please indicate the number of loan transactions in the reserved book collection in the last 5 years (if statistics are available)

	A	B	C
1979		78 920	31 127
1980		73 136	50 140
1981		58 390	37 281
1982		62 203	33 431
1983		61 090	31 453

Comments

The table shows circulation figures for reserve books at two libraries between 1979 and 1983. As was the case with use of the main collection, a more realistic picture would be possible if per capita circulation figures had been requested as well. In view of this limitation, however, the table can be analysed to show the extent to which circulation statistics of reserved book material increased or decreased during the years in question.

If one compares these figures to student use of libraries, the results suggest that these libraries had had generous circulation of reserve items and that students and academic staff tend to rely heavily on reserve materials. The average number of issues per title (cf 7.5.3.2) at Library B in 1983 was 12, and 63 in the case of Library C.

Statistics on the use of reserved book material at Library A were not recorded and this correlates with the absence of data on the size of the reserved book collection as reported in 7.5.3.2.

7.5.5.8. Question : Which of the following are available for use by undergraduate students in your library?

	A	B	C
7 . 5 . 5 . 8 . 1 photocopying facilities	X	X	X
7 . 5 . 5 . 8 . 2 m u s i c l i s t e n i n g facilities		X	X
7 . 5 . 5 . 8 . 3 inter library l o a n facilities		X	limited
7 . 5 . 5 . 8 . 4 microfilm/film r e a d i n g facilities	X	X	X
7 . 5 . 5 . 8 . 5 handicapped u s e r facilities			
7 . 5 . 5 . 8 . 6 o t h e r specialized facilities ( p l e a s e specify) ..			

### Comments

Facilities and resources in a library enhance the service to students. The provision of adequate photocopying facilities is nowadays regarded as a basic library service. Their presence can alleviate many of the problems of availability and can significantly reduce loss through theft and mutilation (cf 4.10). All three libraries provide photocopying facilities to undergraduates, as well as microfiche/film reading facilities. Two libraries report that their music listening facilities are available for use by such students.

The use of inter-library loan to provide convenient access to certain material is a popular practice long observed in libraries. The study revealed that only one library allowed undergraduates full use of its inter-library loan facilities while one library reported that limited access was available. At only one institution were undergraduates denied all access to inter-library loans. No handicapped user facilities or other specialized facilities were available at these institutions.

The ALA Standards for university libraries do not give any recommendations as regards specific facilities like those mentioned above, but it does state that services which facilitate access to nonprint media and access to material in other library collections should be provided (1979:102).

#### 7.5.5.9 SUMMARY

To some extent, the findings of Budd and Di Carlo are reinforced

by this study. In the past evaluative studies of libraries attempted to measure circulation figures and collection use. Gradually over the years, "librarians and library administrators became cognizant of the service function of libraries, which coexists with the storehouse-of-knowledge function" (Budd & Di Carlo, 1982:71).

Services of these libraries include those traditionally found in libraries. While hours of opening were found to be satisfactory, weekend hours are required to determine whether these could be usefully extended. In fact weekends generally could be better utilized as the period when most students have more free time.

As circulation statistics reported in this study tended to fluctuate, per capita circulation statistics are required in order to provide more meaningful data on student and staff use of the library and to determine whether actual use is increasing or decreasing (as far as can be determined when open access to material is provided).

Generally lacking in these institutions are innovative programmes which would relate the library more closely to the academic programme and which would attempt to establish the library as an integral part of the student's intellectual environment. A bibliographic instruction programme is not available at one library and needs to be introduced. At the two libraries where bibliographic instruction is provided the programme could be considerably expanded.

### 7.5.6 GENERAL

Libraries were asked to report on their overall service to undergraduates, pronounced fluctuations in statistics, projections for the future if unlimited funding were available, separate undergraduate libraries and undergraduate user requirements. It is obvious from their responses that all three libraries experienced severe inadequacies in the financial support they received at the time of the survey.

#### 7.5.6.1 Question : In your opinion is the overall service offered to undergraduates by your university library adequate?

	Not satis- factory					fully satis- factory
	0	1	2	3	4	5
A.			X			
B.			X			
C.				X		

#### Comments

When judged on measures of satisfactoriness, the outstanding library would be one which offers extraordinary resources and services in support of the particular role or function which it claims to serve. Libraries in the institutions examined in this study naturally have differing measures of determining whether their overall service is satisfactory or not. One library with a rating of 4 on the scale of 0-5 claims to be approaching full satisfaction in terms of its self assessment criteria. The two other libraries (including one regarded by the researcher as poor and inadequate) both rate their library's performance as regards

overall service as 3 - indicating that they are moderately satisfied with their service.

7.5.6.2 Question : If any pronounced fluctuations are reflected in the statistics you have supplied for the last 5 years please explain reasons for such fluctuations.

The three libraries reported as follows:

- A. "Increased use of photocopies, inter library Loans and journals articles being photocopied extensively (especially because academic staff do not pay if it is for departmental purposes) resulted in the drop in circulation statistics. as well as student boycotts".
- B. "No particular reasons except that photocopying facilities have improved considerably and now becoming over-extended. Possible reason for the drop in circulation statistics were the noisy building operations in the area and narrow pathways between builders rubble hindering access to the library".
- C. "The steep rise in issues 1980/83 can be attributed to the introduction of "minicourse" cassettes being used as reserve material for use in the Library. After heavy initial use, they are now being issued less frequently".

#### Comments

All three respondents commented on fluctuating circulation



statistics. The decline in issues may be attributable to more students reading and studying in the library itself. One library cited the fact that more staff are making use of inter-library loans, although this could be the result of apparent collection inadequacies. Two librarians identified the increased use of photocopies and improved photocopying facilities as a reason for lower book issues. The fluctuating circulation statistics could also have been due to student boycotts as one library stated. At universities where student unrest is endemic the use of the library inevitably suffer. Similarly, as the lecturing programme is disrupted lecturers tend to concentrate more on the lecture plus textbook method of instruction (Allardice, 1987:In Press) as there is insufficient time for emphasizing independent study and its concomitant increased usage of the library.

Another reason for the drop in circulation figures which was not mentioned by any of the three libraries, was that academic staff members might be reading less within their subject. This could be due entirely to increased teaching and administrative loads, especially lecturing to part-time evening students at branch campuses. Further research is needed to establish the validity or otherwise of this premise.

7.5.6.3 Question : If you had adequate funding to provide ideal services to all users what new services and facilities, etc. would you consider introducing with a view to improving and enhancing the existing library service to undergraduates?

The following responses were given:

- A. "We would computerize the Library services and improve audio-visual material".
- B. "Firstly to provide enhanced reserve facilities, secondly completely revamp the library for historical research, and thirdly put all the photocopies into one room and offer a proper service. An enhanced reference service, a room full of microfiche readers, a direct link to Dialog and increasing periodical stocks as far as possible, would be other services we would introduce".
- C.
  1. "Buy and subscribe to more titles (books & journals).
  2. Duplicate more titles (books)
  3. Provide more direct access to INCH (UOFS) Data Bank
  4. Lift restrictions on Inter-Library Loans
  5. Institute a fully-fledged audio-visual service, buying many more video-cassettes".

#### Comments

The librarians who participated in the study, realizing their strengths as well as their inadequacies, generally gave brief

descriptions of plans that their institutions would make for the proper development of the library if they had adequate funding. For the most part, projections in development were centred around the construction of new facilities, expansion of the collection and present facilities, increase of microforms and other nonprint media. As educators give increased attention to the use of the computer in the academic institution, it is not surprising that one library would automate some of its services if funds permitted. While these projections give no assurance that such services and facilities will be forthcoming in the future, they suggest that the librarians have faith in the institution's concern for the proper development of the libraries.

The ALA Standards for university libraries specifically remind university libraries that while great emphasis is put on post-graduates and academic staff needs, "they should be careful to provide adequately for the needs of undergraduates" (1979:102)

7.5.6.4 Question : Could you identify any positive or negative aspects in providing a specialized service geared to the needs of undergraduates in the form of a separately housed undergraduate library?

The three respondents reported as follows:

A. "None".

B. "Never considered it. Always felt that undergraduates should be treated as part of the ordinary customers and should not

segregate physically".

- C. "Under present circumstances it would not be economically feasible to consider a separately housed undergraduate library at this university".

#### Comments

A separately housed undergraduate library is a collection of books, periodicals and other undergraduate study material separately housed, and providing a centralized service to undergraduates for the purposes of this enquiry. Two of the libraries were unequivocally not in favour of setting up a separate undergraduate library. Library C commented on the economic feasibility of an undergraduate library and not on the professional desirability, indicating that it was open to consideration if economically viable. One university librarian indicated that he was not convinced of the value of treating users differently which is implied by such a separation.

- 7.5.6.5 Question : Are there any general comments which you would like to add concerning the needs and requirements of undergraduates?

The three libraries responded as follows:

- A. "None".

- B. "No".

- C. "We are working towards improving the co-operation between the Library and the academic staff as regards library use by students".

#### Comments

Most university libraries work toward frequent skilled undergraduate use of their libraries by providing the most efficient and effective service they can. One library commented that it was making a serious attempt to reach academic staff and bridge the communication gap between lecturers, library staff and students. in this regard the ALA Standards for university libraries maintain that librarians should work closely with academic staff (1979:103).

#### 7.6 SUMMARY OF FINDINGS OF THE EMPIRICAL SURVEY

The investigation was limited to three university libraries in a contiguous region in South Africa which are traditionally below the medium size South African university library (cf 7.3.2). In conducting this study the researcher used the survey method. Questionnaires were distributed to the head librarians at each institution. Additional data was collected through follow-up visits to the libraries. Guides to the university libraries, and university calendars and vice-chancellor's annual reports were used as sources of data.

Data collected through the questionnaires were analysed. One of the various variables that apply to this survey (cf 6.7.3.2.) shows that these university libraries have relatively similar

student enrollments with two universities having a higher percentage of black undergraduates than the other one (cf profiles of university A, B and C in (6.7.2.1-3). As mentioned earlier the ALA Standards for university libraries were used to evaluate the libraries and measure their effectiveness. Criticism may well be directed at the researcher for using these American Standards to judge South African university libraries since such standards are clearly set far higher than the standard which most South African libraries can attain, however, they were used because at the time the questionnaire was formulated they were the only international standards available. In testing the hypothesis that the better the facilities 'the better the services of university libraries', it was not possible to correlate input with output by means of performance ratings (such as issues per student/staff, library material available for use by students/staff, accommodation, and library orientation) other than by qualitative library standards. The introduction to the ALA Standards is quite explicit in stating that the standards are for evaluative purposes:

These standards have been prepared to assist faculty, university administrators, librarians... and others in the evaluation and improvement of university library services and resources (1979:101)

The high degree of individuality of each library surveyed, its traditions, responsibilities and policies colour its responses to the provision of facilities and services, and it is against this background that the ALA library standards must be viewed and the three libraries evaluated. The study reflected the growth of financial support enjoyed by these institutions and found that one library has continuously remained below standard. The study

suggested that substantial funds were needed if this library was to overcome its deficiencies from an prolonged period of inadequate budgets.

An examination of the budget for library material shows that one library has been impoverished and hardly able to exist in view of the meagre funds provided for its support. Substantial improvement was observed in the allocation of financial resources over the five-year period to the libraries under study. However, in general the overall library expenditures as a share of their universities' gross budget still fall below the minimum 1969 ALA requirement of 5 per cent (Downs & Heusseman, 1970:29) (the 1979 ALA Standard did not specify the percentage).

In one institution the library staff - professional and other- appeared to be below the level required for the delivery of satisfactory service to the institutions constituencies. All three libraries appeared to have made little provision for correcting the present trend toward too few clerical persons on their staff.

Deficiency in size of collection was found in Library A and while Library C was also deficient in sheer volume count, it was established much more recently and was growing at a rapid rate (as evidenced by the fact that its volume count had already overtaken Library A which had an older date of establishment) (cf 6.7.3.1).

Library collections in the three institutions totalled 743 365

units but with a total monograph count of 506 720 monographs in 1983. Findings revealed a deficiency of 22 701 monographic volumes in these institutions as a whole. None of the three libraries reported having a collection-development policy statement.

Library facilities in these institutions were generally adequate, although the overall impression of Library A was uninviting. Seating space in these libraries was inadequate. The three libraries had decentralized collections.

Library guides to the library's use were provided by two libraries; library hours were generally uniform at all three libraries although these are limited. Reference services are provided by the three libraries.

Circulation figures at all three libraries showed increases and decreases. Fluctuations were attributed mainly to increased use of photocopiers and student boycotts. Although declining circulation as usage of the libraries prompt the researcher to conclude that the institutions might be becoming primarily textbook-orientated rather than source - and literature orientated. In the responses to overall services to undergraduates it was evident that although they are positive about the satisfactoriness of their service, the needs of these libraries are not uniform. Of central importance however, was the need for substantial and sustained financial support to permit them to overcome their problems. The responses from university librarians who completed the questionnaire, indicated that two of



them were aware of the problems which their libraries faced. Perhaps because of the rural isolation of the one respondent, awareness of the problems and lack of library provision for undergraduates was not deemed problematic.

The impact of SAPSE (cf 2.6) on these library programmes is yet to be measured but may well indicate that these university libraries will be able to embark on new projects through the support that the SAPSE subsidy formula provides to their institutions. The installation of the SABINET system subsequent to the survey has not been examined and its impact on library service not evaluated. This is a limitation of the study. New/and or expanded facilities at these libraries which may now be seen in the libraries may have contributed to better library provision for their users.

To succinctly sum up, the collections at the three universities provide support for student curricula and provide a source of primary material for scholars engaged in research activities. the greatest problem which two of these collections have faced, is the lack of adequate financial support to permit them to grow and develop, to provide sufficient staff for servicing the collection, to process and preserve valuable material, and to engage in activities which will promote the teaching function which they have the potential for supporting. The consequences of this inadequate support at Library A include the small collection, the shortage of professional and clerical personnel, the lack of innovative library programmes and the lack of the latest technologies. Automated services are not visible at any of

the three libraries, and no attempts have been made to modernize their library programmes. Problems surrounding the collection at these institutions are as critical and crucial today as they were when this study was made.

## SECTION D : CONCLUSIONS

### CHAPTER 8 : CONCLUSIONS

In this section the research will endeavour to correlate the main findings of the literature survey with the position that pertains at the three South African universities involved in the questionnaire.

#### 8.1 REVIEW OF THE HYPOTHESIS

The hypothesis postulated in 1.1 stated:

that the better the facilities the better the services offered by a university library.

This pre-supposition which was fully explored in the literature survey, led to a substantiation of the broad hypothesis. The empirical survey was developed out from a certain concept, a standard assumption - that good provision is axiomatic - in order to establish what the nature of the provision was at the three university libraries surveyed. The empirical survey, since it was not a probing of the success of library provision, did not have the same thrust as the literature survey. The purpose of the empirical survey could have been to establish both what the library provision was, and what its effects on the university's in question were. It was difficult for the researcher to do both - since such an investigation was not within the scope of the study. In order to establish whether the state of library provision for undergraduates has any effect on academic success,

a survey of academic staff and students is required and could form part of a follow-up study.

## 8.2 SUMMARY OF CONCLUSIONS.

The most important result that came out of the analysis was that an inadequate budget results in poor facilities and a limited number of staff (cf 7.5.1). This coincided with the results obtained by Eave (1979 : 177 - 84) and in the United States by Smith (1977 : 221 - 2).

The major thrust of this thesis has been the contention that the university library's responsibilities have shifted heavily from a custodial, passive role to a proactive one (Bryan, 1977 : 45), with the emphasis on undergraduates as opposed to researchers, postgraduates and academic staff. A change, which in South Africa will be induced by increased undergraduate student enrollment (viz. the 1960s in the United States), and which will be further exacerbated by the increasing proportion of black undergraduates (cf 1.1) who matriculate from the present inadequate system of black schooling. The very nature of the new technologies has also contributed to this need for the library to focus on the provision for undergraduates (cf 2.1.2). In spite of the noticeable change in the educational role of university libraries as evinced by the literature, the data revealed that two of the three university libraries (A and B) still had a tendency to emphasise their custodianship approach as opposed to the conscious service orientation of one (C) (cf 7.5.5.5.1.6).

A possible reason for the more 'traditional' role employed by libraries A and B is their organizational structure. The impact of new technologies requires a re-orientation from the technical service function towards reader services (cf 2.2.2). The empirical evidence revealed that library professional staff were heavily concentrated on this aspect of library operations in libraries A and B (cf 7.5.2.5), whereas Library C had a more equitable distribution of staff between the two service areas. The absence of any computerized technology in the three libraries could account for the fact that technical services still assumes prominence in their organizational structure.

Organizationally, it is in the interests of university libraries to have a centralized collection, since a decentralized collection scatters the collection across the campus and can seriously inconvenience students (Braden, 1970 : 390). The survey showed that all three libraries had decentralized collections, with the oldest library (B) having the most decentralized collection. This correlates with the findings of the literature survey that the older a library, the more decentralized the collection (Fielding, 1977 : 387).

Library accommodation is an important variable when considering the library facilities needed by undergraduates, as the size of the space, furniture and equipment the library contains, must be able to adapt to change (Edwards, 1987 : 20). The SAPSE space norms recommend a provision for seating 25% of the total FTE student enrollment. In 1983 all three libraries failed to meet this standard (cf 7.5.4.1), although Library C indicated that it

had made provision for future expansion (cf 7.5.4.1.1). According to Ugonna, residential universities - and particularly African universities - should make provision for a higher seating capacity because a lack of alternative study accommodation and Africa's chronic housing shortages (1983 : 128). The findings reveal that Library A shares this concern, and comments that it is because of the type of residential accommodation that students have, that it is necessary for the library to make more provision for them to read in the library (cf 7.5.4.4.1). This also confirms Wilkinson's view that where there is a high density of undergraduate students, libraries become a "screaming success as study halls" (1971 : 1569).

A discernable trend in the stable development of the collection, is the need for a collection-development policy (Atkinson, 1986 : 140), and shared responsibility for book selection (shared between the academic and library staff) (Gardner, 1985 : 144-5). It appears from the analysis that none of the three university libraries had a collection-development policy (cf 7.5.3.3) and that selection of material is still done the traditional way (academic staff having principal responsibility for selection) (cf 7.5.3.3).

Gross size of a library's collection is no longer a fashionable preoccupation of libraries (Roberts, 1977 : 464), however the size of the collection should be adequate to provide for the basic needs of its users and particularly undergraduates. From the empirical evidence it would seem that Library A's collection in relation to those of B and C is under sized (cf 7.5.3.1).

Libraries of similar size can reflect very different selection choices (Pennington, 1985 : 127), and this would appear to be the case with the three university libraries surveyed. Library C because of its bilingual composition, contains a collection which reflects a high percentage of works published both in English and in Afrikaans (cf 6.7.3.8), whereas Libraries A and B which are situated at English medium universities, comprise mainly works in English.

At universities where there has been a increase in undergraduate student enrollment in certain courses, students are frustrated when there is only one copy of a book available (Smith & Granade, 1978 : 468). Libraries try to solve the problem by providing duplicate copies according to a formula (Page, 1977 : 322). The empirical data revealed that only one of the three libraries had a policy for purchasing duplicate copies of books for undergraduate use (cf 7.5.3.5). It can be concluded that where undergraduates form the larger proportion of the student body, then libraries must make funds available for purchasing duplicate copies to satisfy student needs.

Collection evaluation is crucial to maintaining a useful, up-to-date collection, and growth of the collection must be controlled by regular weeding (Kuhn, 1969 : 199). The results of the survey showed that only one library (C) has a policy for systematically weeding its collection (cf 7.5.3.6), although it only did so in relation to newer editions (cf 7.5.3.6.1). Thus it can be concluded that mistakes made in purchasing or worn-out mutilated books (Moss, 1978 : 391), are not withdrawn from the collections

of libraries A or B.

In line with the changes induced by the new technologies in the role of the library and its organizational structure, so too has there been a transition in the staffing of university libraries. The academic librarians's responsibilities have shifted from a keeper of books to a manager responsible for allocating expensive resources and managing "cadres of highly skilled support staff" (Veaner, 1985 : 300). The emphasis on the professionalism of librarians (Foskett, 1982 : 47) is essential with the demands that will be placed on them by technology, and for which they will be accountable. So it is inevitable that professional librarians will be freed of much of the manual routine work that has previously characterized professional work, and that there will be a "continuing displacement of these task-oriented activities toward support staff" (Veaner, 1985 : 304). Professional staff will thus be 'freed' to concentrate on making the library more 'user friendly' (Dunn, 1986 : 480). The empirical evidence revealed a low incidence of professional staff at Library A - almost half the number of such staff at libraries B or C (which each have 13 professional staff)(cf 7.5.2.1). The ALA standards for university libraries recommends that when determining staff size adequacies, libraries should employ a ratio of one professional to two non-professionals (1979 : 107). However, none of the three libraries measures up to this guideline even when clerical staff are included along with para-professional staff in a 'nonprofessional staff' category. The researcher concludes that this may mean that at these libraries, professional staff are engaged in many semi- or para-professional



library tasks (cf 7.5.2.2.1).

The changes libraries are experiencing in all areas of their operations are even more marked in terms of their financial arrangements. The rapidly growing pressure for economy because of the decline in the value of the rand, and particularly because of the substantial increases in periodical subscriptions (U.C.T. Library Committee collection development sub-committee working document, undated : 1) highlight the financial predicament university libraries are facing. The amount spent on library material by the three university libraries as shown in the empirical data, revealed that actual spending (cf 7.5.1.1.2.1) by C was consistently higher than A or B and that despite this advantage, C felt hampered by its funding and would have liked to have made more provision for library material (cf 7.5.6.3).

A historical overview of the funding of South African university libraries (cf 2.6.3) revealed the meager funds which the so-called 'ethnic' (Lor, 1981 : 75) universities have received over the years (cf 2.6.3.4). The survey substantiated this finding, as Library A which is attached to an ethnic institution, consistently received less financial support than either B or C during the five year period analysed (cf 7.5.1.1). However the introduction of the SAPSE subsidy formula (cf 2.6.3.5) should result in improved funding for library services and enhance the quality of financial provision since it is based on inputs and outputs (Venter, 1982 : 29), although it will not redress past inadequacies. This is in line with Cooper's view, that formulas which encourage effective financial management are a "move

towards funding for excellence" (1986 : 358).

The researcher concurs with Eave's recommendation that irrespective of the total subsidy it is essential that the university administration pass on in toto the percentage given by the State to each university for the purchase of library material (1979 : 177). The percentage allocated to the library from the total university budget was established post-hoc (cf 7.5.12) and shows that Library A received the lowest percentage (2,8%) while Library C received the highest (4,7%). The interminable problem of inadequate funding the researcher concludes, can create concern for the educational potential of a university library and affect its ability to support its educational programme.

The impact of change has also had a marked influence on reader services. Bibliographic instruction and reference service render the reference desk the most important of all library services (Rader, 1980 : 97). However, student ignorance of this service is a major problem (Nelson, 1973 : 2), with the empirical data suggesting that 50% of undergraduates at all three university libraries request information at their reference desks (cf 7.5.5.6). Librarians working at the reference desk are generally asked informational and reference questions (Emdad & Rogers, 1979 : 451), and the majority of these questions are brief directional questions (Wilkinson, 1970 : 5). According to the empirical evidence two libraries (A and B) reported a 50 : 50 spread between general library guidance questions and specific information questions, whereas C estimated that its undergraduates asked more specific information questions than library

guidance questions (cf 7.5.5.6.1). There may be some correlation between this and the fact that Library C has a definite orientation programme (cf 7.5.5.5.1). It can therefore be concluded that librarians must provide assistance at the reference desk to help students utilize the services of the library.

The role of the librarian is critical to the implementation of library programmes to assist users and maintain a proactive stance with the academic community rather than a reactive one (Creth, 1985 : 471). Based on the empirical data it would appear that while libraries B and C had more staff involved in reader services (cf 7.5.2.4), when it came to library orientation, none of Library B's staff were involved (cf 7.5.5.5.1.4). The quality of service provided by a university library depends very largely on its effectiveness in acquainting its users with the resources of its collection. User education is increasingly recognized as a key element in library provision for undergraduates (Dolan & Barrett, 1987 : 330) and from the empirical evidence it appears that two libraries (A and C) do offer library orientation for users (cf 7.5.5.5). However, Library A adopts a reactive stance, waiting for students to request orientation (cf 7.5.5.5.1).

The form which library orientation takes is usually a brief initial guided tour (Wilkinson, 1971 : 1570). In this respect, both libraries A and C offer library orientation tours (cf 7.5.5.5.1.2). An orientation lecture or 'warmth seminar' (Mellon, 1986 : 164) is considered essential at the beginning of the academic year (Aguolu, 1983 : 4). The data reveals that none of the three university libraries give such a lecture (cf

7.5.5.5.1.3). Many libraries experiment with new ways of introducing students to the library and employ audio-visual technology as an effective and alternative way to introducing students to the library (Whyte, 1977 : 285). Needless to say, none of the university libraries surveyed provided anything other than a library tour (cf 7.5.5.5.1.2).

Part-time study has become increasingly popular (Berry, 1979 : 105) and many universities have started branches of the university (cf 2.2.4). Students attached to these branches should receive the same type of library orientation as all other students (Talmadge & Kidman, 1962 : 513). The empirical survey shows that only in the case of Library A are students from the university branch treated in the same way when they visit the library.

Course-related instruction and the learning of basic library skills are invaluable to undergraduates to assist them in their first 'research' efforts (Stoan, 1984 : 106). Judging from the empirical evidence none of the three libraries was involved in any 'follow-up' talks after library orientation (cf 7.5.5.5.1.5). The need to evaluate user education offered by a library is expressed in the literature (Mellon, 1986 : 165). In this respect Library C felt that its programme should be evaluated (cf 7.5.5.5.1.6.1) but nevertheless thought its programme was 'fairly' adequate (cf 7.5.5.5.1.6). Libraries A and B were not satisfied with their orientation practices. It is concluded that South African university libraries must in future focus upon unique library orientation programmes, courses in basic library

skills, and course-related instruction, to teach undergraduates to maximize library benefits, followed by user evaluation of the programme.

Guides to the university library constitute one of the most common vehicles for library publicity, and as a library teaching aid can be used in conjunction with library orientation (Koppelman, 1976 : 256). Two of the libraries (A and C) provided a printed guide to their libraries. The conclusion drawn is that it is axiomatic that such guides should be provided.

Besides user instruction to promote effective use of a university library, libraries need to know what other factors promote library use (Veit, 1975 : 141). One of the prime indicators of library use are circulation statistics (Whyte, 1977 : 337), and as Voigt points out "academic library statistics bear out, ... [that] circulation reflects primarily use by undergraduates and others not involved in research" (1979 : 66). The empirical data revealed that circulation statistics for all users over the five year period 1979 to 1983, tended to fluctuate, and showed a decline in use both with items from the main circulation desk (cf 7.5.5.7) and from the reserved book collection (cf 7.5.5.7.1). These fluctuations were attributed to increased photocopier use and to student boycotts (cf 7.5.6.2). However, Osundina believes that good access to the library can contribute to library usage (1975 : 77), and Library B maintains that building operations near the library could have contributed to the decline in circulation statistics.

The researcher has attempted to demonstrate an awareness of undergraduate student needs and explored these through a detailed examination of the undergraduate library concept (cf Chapter 5). The essence of this concept, being that the undergraduate has special needs which can only be met by special facilities and services designed with the undergraduate in mind (Moss, 1966 : 86). If there is equal treatment of all students, the first year student may find the size of the library inhibiting and the collection confusing (Veit, 1976 : 373). The empirical data showed (cf 7.5.5.2) that Library A treated all students in the same way, while Library B not only tried to provide books for all undergraduate courses and multiple copies where necessary, but encouraged academic departments to devote a 'reasonable proportion' of their book budget towards monographs for undergraduates.

Library C was the only university library to have specific objectives in terms of undergraduates, with the emphasis on assisting them to fully exploit the collection.

The provision of a specialized service to undergraduates in the United States culminated in the establishment of separately housed undergraduate libraries (cf 5.3.2). The data showed that libraries A and B were unequivocally against separate undergraduate libraries, while Library C felt that the main barrier to providing such a facility was financial.

Recently, Hoadley has argued that the increased provision of bibliographic instruction for undergraduates in university libraries has obviated the need for separately housed undergraduate libraries (1982 : 5), although it would appear that when

the situation is appropriate, a separate undergraduate library can still fill a much needed function (Laidlaw, 1982 : 8). The establishment of an undergraduate library would, in Ugonna's opinion, obviate the need for a reserved book collection and "a multiplicity of departmental libraries" (1983 : 126). The reserved book collection is intended to control and provide access to student course work material, photocopies of journal articles and multiple copies of textbooks (Gistitin, 1977 : 40), and the collection is mainly used by undergraduates. The data shows that the collections at libraries B and C were generously used (cf 7.5.5.7.1) although the collection at B was significantly larger than C's (cf &.5.3.2). Library A was not able to provide data on either aspect despite the fact that it maintains a reserved book collection. It can be concluded that the provision of a reserved book collection is a necessary facility for any university with a high proportion of undergraduates (cf 6.7.3.2).

As a final conclusion, it seems to the researcher that with black undergraduate student numbers rising, and expected to rise phenomenally in the future (cf 1.1), university libraries must gear themselves for concentrating on library provision for undergraduates. In particular, libraries will have to make appropriate provision for the disadvantaged black student who has been plagued by the many barriers which have hindered him during his scholastic career, assisting these students who are expected to read prescribed material to learn to use the library as an independent study facility. Librarians must work with students and academic staff "to promote the importance of information-

gathering skills and attitudes conducive to lifelong learning (Kemp, Nofsinger & Spitzer, 1986 : 473). Undergraduates need clear-sighted and deliberate provision for their needs.

### 8.3 IMPLICATIONS FOR THE FUTURE.

Clearly, a follow-up study is needed to consider the many developments in university libraries since the data was collected. A revised study may also examine the current condition of libraries and the impact of dwindling financial resources on their programmes and services. Perhaps a definitive financial history of all these institutions centering around external funding should be undertaken as a separate work.

A follow-up study may demonstrate the effect of the IFLA Standards for university libraries (1985) on the effectiveness of university libraries in South Africa since their acceptance by the Inter-Universities Library Committee in early 1987. The application of such standards to library examination should in no way lead to the conclusion that these libraries have been unable to respond positively to the demands placed upon them by their institutions and by their communities, even though the level of response might not have been as high as they desired. Their ability to serve research functions is particularly noteworthy. What is needed most is a scheme designed to incorporate the thrust of various standards as well as to show the distinctiveness of South African university libraries.

South African university libraries are faced with a difficult



task and they must be prepared to meet the unpredictable challenges of change. They must now begin to redefine their mission in terms of the undergraduate, and to establish goals which will lead to the full realization of that mission. Their ability to respond to newer missions effectively and efficiently will be the direct result of the immediate changes which they initiate, the long-range programme planning in which they must engage, the programme monitoring and evaluation which they must make, and well-executed action steps which they must take towards achieving new goals. Both the institution and the library must design programmes for undergraduates which will lead to continuous self-renewal.

**SECTION E : ANNEXURES**

QUESTIONNAIRE

UNIVERSITY OF CAPE TOWN

M.A. (Librarianship)

Library provision for undergraduate

C M ALLARDICE

## GLOSSARY

Clerical Assistant is a staff member who has no library qualifications, but acts in a supportive capacity.

F.T.E. is the abbreviation for full time equivalent.

Professional Librarian is one whose basic level of professional education has been either a four-year professionally oriented B. Bibl. degree or a non-professional Bachelor's degree plus a postgraduate diploma or its recognised equivalent as defined in the Standards for education for library and information science.

Para-professional Library Assistant is one whose basic qualification is a Lower Diploma in Library Science or its recognised equivalent as defined in the Standards for education for library and information science.

Reserved Book Collection refers to a collection of library materials in heavy demand by students, issued on a short loan basis (also called Short Loan Collections).

Undergraduate Library is a collection of books, periodicals and other undergraduate study material separately housed, and providing a centralised service to undergraduates. Two well known examples are the Lamont Library Catalog and University of Michigan Shelf List which are largely duplicate collections of books found elsewhere in the university library system. A more recent example is the Ontario New Universities Project (ONULP) established in 1963 to compile, by 1967, five 35,000-volume basic college library collections. The carefully selected collections in undergraduate libraries comprise books to which all undergraduates should be exposed as part of their liberal education and/or as recommended materials to support their studies.

## 1 FINANCE

1.1 What was your total library budget in the last 5 years?

For 1979	R
1980	R
1981	R
1982	R
1983	R

1.1.2 What percentage of your total library budget was spent on the purchase of library material in the last 5 years?

For 1979	%
1980	%
1981	%
1982	%
1983	%

## 2 STAFF

2.1 Number of F.T.E. professional positions budgeted for on the staffing establishment, including those unfilled, over last 5 years.

For 1979	
1980	
1981	
1982	
1983	

2.1.1 Number of F.T.E. professional positions filled on the staffing establishment over the last 5 years.

For 1979	
1980	
1981	
1982	
1983	

- 2.2 Number of F.T.E. para-professional library assistant positions budgeted for on the staffing establishment, including those unfilled, over last 5 years.

For 1979	
1980	
1981	
1982	
1983	

- 2.2.1 Number of F.T.E. para-professional library assistant positions filled on the staffing establishment over last 5 years.

For 1979	
1980	
1981	
1982	
1983	

- 2.3 Number of F.T.E. clerical positions budgeted for on the staffing establishment, including those unfilled, over last 5 years.

For 1979	
1980	
1981	
1982	
1983	

- 2.3.1 Number of F.T.E. clerical positions filled on the staffing establishment over last 5 years.

For 1979	
1980	
1981	
1982	
1983	

2.4 How many members of F.T.E. staff are employed in Reader Services in your library?

- 2.4.1 professional  
2.4.2 para-professional  
3.4.2 clerical  
2.4.4 other (please specify) .....  
.....


2.5 How many members of F.T.E. staff are employed in Technical Services in your library?

- 2.5.1 professional
- 2.5.2 para-professional
- 2.5.3 clerical
- 2.5.4 other (please specify).....
- .....
- .....


### 3 SCIPE AND CONTENT OF THE COLLECTION

3.1 What is the total size of your collection  
(as at the end of 1983)?

- 3.1.1 books (monographs) vols.
- 3.1.2 bound periodical vols.
- 3.1.3 bound vols. of newspapers
- 3.1.4 sound recordings (units)
- 3.1.5 films (units)
- 3.1.6 video cassettes (units)
- 3.1.7 filmstrips (units)
- 3.1.8 government publications (bound vols.)
- 3.1.9 microforms (units)
- 3.1.10 pamphlets
- 3.1.11 sheet music and scores (units)
- 3.1.12 slides and tape/slide programmes  
(units)
- 3.1.13 other (please specify) .....  
.....  
.....
- 3.1.14 Total no. of units .....

[illegible]

3.2 What was the total no. of titles held in your reserve book collection (during 1983)?

no. of items

--

3.3 Outline briefly the collection development procedure for material for students and staff, indicating the respective roles of library staff, academic staff, students and other users, if any, in recommending and ultimately selecting such material.

.....  
 .....  
 .....  
 .....  
 .....  
 .....

3.3.1 Does your library have a specific policy for collection development of material for undergraduate use (excluding the provision of multiple copies)?

YES	NO

3.3.1.1 If yes, please elaborate

.....  
 .....  
 .....  
 .....  
 .....  
 .....

3.3.1.2 Would you consider it desirable to use as the basis for collection development in your library one or more of the recognised lists recommended for inclusion in an undergraduate library's collection development policy? (c.f. Glossary).

.....  
 .....  
 .....  
 .....



3.4 What procedures are followed in putting an item on reserve including its selection?

.....  
 .....  
 .....  
 .....  
 .....  
 .....

3.5 Does your library have a policy of purchasing multiple/duplicate copies of books only for undergraduate use?

YES	NO

3.5.1 If yes, do you have a specific formula?

YES	NO

3.5.2 If no, please comment if you so wish.

.....  
 .....  
 .....  
 .....  
 .....  
 .....

3.6 Does your library have a policy of evaluating and weeding your collection systematically and on a continuing basis.

YES	NO

3.6.1 If yes, please specify your procedures.

.....  
 .....  
 .....  
 .....

## 4 ACCOMMODATION

4.1 Total seating capacity of your library?

no. of seats

--

4.1.1 Please elaborate if you so wish.

.....

.....

.....

.....

4.2 Do you make specific provision for seating undergraduate students in your reserved book collection?

YES	NO

4.3 Is the reserved book collection located within the Main Library building?

YES	NO

4.3.1 If yes, is it located in a separate room?

YES	NO

4.3.2 If no, please specify where it is housed.

.....

.....

.....

.....

.....

.....

4.4 When planning your library's facilities did you take into account that undergraduate students may use the library also for study purposes.

YES	NO

4.4.1 Please elaborate if you so wish.

.....

.....

.....

4.5 Does your library building house the entire collection of library materials (see question 3.1), i.e. is the collection completely centralized?

YES	NO

4.5.1 If no, where else are library materials housed?

- 4.5.1.1 branch library (on campus)
- 4.5.1.2 branch library (off campus)
- 4.5.1.3 departmental libraries
- 4.5.1.4 institute libraries
- 4.5.1.5 other (please specify) .....
- .....
- .....


5 READER SERVICES

5.1 What are the regulations governing use of your library by undergraduate students? (If you have a written policy please provide a copy)

.....

.....

.....

.....

.....

.....

5.2 Please give a brief synopsis of your objectives in providing library service to undergraduate students.

.....

.....

.....

.....

.....

.....

5.3 Do you provide a handbook or printed guide to the library for the use of undergraduate students?

YES	NO

5.3.1 If yes, please attach a copy of the guide to the library.

5.4 Please specify the Main Library's total number of hours of opening per week.

during term  
during university vacations


5.4.1 Please specify the Main Library's total number of hours of opening in the evening after 6 pm. per week.

during term  
during university vacations


5.4.2 If your reserved book collection is open at different times from the Main Library's hours of opening, please specify the time schedule for its times of access.

.....  
.....  
.....

5.5 Does your library offer orientation in the use of your university library?

YES	NO

IF NO, PLEASE PROCEED TO QUESTION 5.6

5.5.1 If yes,

5.5.1.1 Please outline your current library orientation policy and procedures for undergraduate students.

.....  
.....  
.....  
.....  
.....  
.....

5.5.1.2 Which of the following does the library orientation consist of? (You may tick ✓ more than one item if necessary.)

- 5.5.1.2.1 lecture
- 5.5.1.2.2 film
- 5.5.1.2.3 videotape
- 5.5.1.2.4 slide/tape presentation
- 5.5.1.2.5 guided tour of library
- 5.5.1.2.6 audiotaped walking tour of library
- 5.5.1.2.7 printed self-guided walking tour of library
- 5.5.1.2.8 other (please specify) ..  
.....  
.....


5.5.1.3 If an orientation lecture is given, what information does it contain? Please give a brief synopsis.

.....  
.....  
.....  
.....  
.....  
.....

5.5.1.4 Which members of staff provide  
such library orientation?

5.5.1.4.1 reference librarian(s)

5.5.1.4.2 subject librarian(s)

5.5.1.4.3 other (please specify) ....

.....

.....


5.5.1.5 Are there any follow-up talks  
on use of the library given to  
undergraduate students during the  
rest of their undergraduate years?

YES	NO

5.5.1.6 Do you consider your current  
library orientation practices  
adequate?

YES	NO

5.5.1.6.1 If no, please comment if so  
desired. ....

.....

.....

5.5.1.7 If you have a branch library off-  
campus, what library orientation  
is given to undergraduates registered  
with that branch, when they visit  
the main library?

5.5.1.7.1 same as undergraduates registered  
at the main library

5.5.1.7.2 none

5.5.1.7.3 other (please specify) ....

.....

.....


5.6 Please give a rough estimate of what percentage of reference questions received from your library's users, are asked by undergraduates, as opposed to other users.

1 - 20%  
20 - 50%  
More than 50%


5.6.1 Please give a rough estimate of the percentage of reference questions asked by undergraduates of a brief informational and directional nature in each of the two categories below.

5.6.1.1 general library guidance questions

5.6.1.2 specific information questions

TOTAL

100%

5.7 Please state number of items circulated to all users in last 5 years (if statistics are available).

For 1979  
1980  
1981  
1982  
1983


5.7.1 Please indicate the number of loan transactions in the reserved book collection in the last 5 years (if statistics are available)

For 1979  
1980  
1981  
1982  
1983


5.8 Which of the following are available for use by undergraduate students in your library?

- 5.8.1 photocopying facilities  
5.8.2 music listening facilities  
5.8.3 inter library loan facilities  
5.8.4 microfiche/film reading facilities  
5.8.5 handicapped users facilities  
5.8.6 other specialized facilities  
(please specify) .....  
.....


## 6 GENERAL

6.1 In your opinion, is the overall service offered to undergraduates by your university library adequate?

not  
satisfactory

fully  
satisfactory

0	1	2	3	4	5

6.2 If any pronounced fluctuations are reflected in the statistics you have supplied for the last 5 years please explain reasons for such fluctuations

[illegible]



6.3 If you had adequate funding to provide ideal services to all users what new services and facilities, etc. would you consider introducing with a view to improving and enhancing the existing library service to undergraduates at your library? Please specify such services.

.....  
.....  
.....  
.....  
.....  
.....

6.4 Could you identify any positive or negative aspects in providing a specialized service geared to the needs of undergraduates in the form of a separately housed undergraduate library?

.....  
.....  
.....  
.....  
.....  
.....

6.5 Are there any general comments which you would like to add concerning the needs and requirements of undergraduates?

.....  
.....  
.....  
.....  
.....  
.....

CHECKLIST OF ITEMS REQUESTED TO BE ATTACHED TO RETURNED WITH  
QUESTIONNAIRE

☐

Copy of regulations governing use  
of your library by undergraduate  
students (Question 5.1)

☐

Copy of guide to the library for  
undergraduate students (Question 5.3.1)

Position of person completing this questionnaire:

\_\_\_\_\_

Please return questionnaire to:

C Allardice  
P O Box 252  
ALICE 5700  
Ciskei

# BIBLIOGRAPHY

- ADAMS, M (1979). Effects of evaluation on teaching methods. In: Kirkendall, C A. Improving library instruction : how to teach and evaluate. Ann Arbor (Mich.) : Pierian Press, p. 98.
- ADAMS, R J (1977). Teaching packages for library user education. Audiovisual Librarian, 3 (3) : 100-06.
- ADAMSON COMMITTEE (133). see UNION OF SOUTH AFRICA. (1933)
- AGUOLU, C.C (1982). The education of library users in Nigerian universities, II. Education libraries bulletin, 25 (3) : 20-9.
- (1983). The education of library users in Nigerian universities, II. Education libraries bulletin, 26 (1) : 1-13.
- ALLARDICE, C.M (1986). The bridging course. Paper presented to Fort Hare Women's Association, 9 April 1986. (Unpublished).
- (1987a). The effects of campus unrest on the language proficiency of university students. Per linguam, 3 (1), (in Press).
- (1987b). Inter-library loan. University of Fort Hare Library newsletter, no. 3: 1-4.
- (1987c). Report to the Library Control Committee on visits to university libraries 17-27 November 1986. (Unpublished).
- ALLEN, K.W (1971). Use of community college libraries. [n.p.] : Linnet books.
- AMERICAN COLLEGE AND RESEARCH LIBRARIES. Toward guidelines for bibliographic instruction in academic libraries. College and research libraries' news, 36 : 137-9.
- Standards for faculty status for college and university librarians. College and research libraries news, 33 : 210-2.
- AMERICAN LIBRARY ASSOCIATION (1979). Standards for university libraries. College and research libraries' news, 40 (4) : 101.
- Collection Development Committee. (1979). Guidelines for collection development. Chicago : The Association.
- Reference and Adult Services Division. Standards Committee. (1979) A commitment to information service : developmental guidelines. Research quarterly, 18 : 275.
- AMMUNDSEN, V (1977). Problems of planning new university libraries. IATUL, 9 : 75-82.
- ANDERSON, P.M. & MULLER, E.G (1983). Participative planning for library automation : the role of the user opinion survey. College and research libraries, 44 (4) : 245-54.

- ARIEW, S.A (1978). The failure of the open access residence hall library. College and research libraries, 39 (5) : 372-80.
- THE ASSOCIATION OF RESEARCH LIBRARIES (1971). The university library in the seventies; minutes of the seventy-eighth meeting, May 14-15, 1971, Colorado Springs. Colorado : The Association.
- ASHEIM, L (1967). Manpower : a call for action. Library journal, 92 : 1795.
- ATKINSON, H C (1983). A brief for the other side. Journal for academic librarianship, 9 (4) : 200-1.
- ATKINSON, R (1986). The language of the levels : reflections on the communication of collection development policy. College and research libraries, 47 (2) : 140.
- AUCAMP, P (1972). Die sentralisasie en desentralisasie van die universiteitsbiblioteek. Potchefstroom Universiteit vir C.H.O., M.A. (Bibl).
- AXFORD, H.W (1971). An approach to performance budgeting at the Florida Atlantic University Library. College and research libraries, 32 : 87-104.
- AYRES, F.H. & HALL, J eds. (1974). Information services in university libraries : proceedings of a SCONUL exchange of experience seminar on information services in university libraries held at the University of Bradford from 7th to the 9th of December 1973. Bradford : SCONUL.
- BACH, H. (1957). Acquisition policy in the American academic library. College and research libraries, 18 : 441-51.
- BAHR, A.H (1978). Book theft and library security systems 1978-79. White Plains [N.Y.] : Knowledge Industry Publications.
- BAILEY, B (1985). Thesis practicum and the librarian's role. Journal of academic librarianship, 11 (2) : 79-81.
- BAILEY, S.K (1978). The future of college and research libraries. College and research libraries, 39 (1) : 4-9.
- BAKER, B (1986). A conceptual framework for teaching online catalog use. Journal of academic librarianship, 12 (2) : 90-6.
- BALL, M.A. & MAHONY, M (1987). Foreign students, libraries and culture. College and research libraries, 48 (2) : 160-6.
- BANTU education in the Republic of South Africa 1969/70. (1969). Johannesburg : Erudita.
- BARKEY, P. (1965). Patterns of student use of a college library. College and research libraries, 26 : 115-6.

- BARR, D (1977). Academic libraries in decline. New library world, 77 (916) : 185-6.
- BASSON, J.D. (1972). 'n Ontleding van die onderwysfinansies in die Republiek van Suid-Afrika. Pretoria : HSRC, (WS-2).
- BATESON, N (1984). Data construction in social surveys. London : Allen and Union.
- BATTIN, P (1984). The library : center of the restructural university. College and research libraries, 45 (3) : 170-6.
- BAUMANN, C (1972). Angus Snead MacDonald. Metuchen (N J) : Scarecrow.
- BAUMOL, W.J. & MARCUS, M (1973). Economics of academic libraries. Washington, D.C., American Council on Education, 1973.
- BECKER, J (1969). Information network prospects in the United States. Library Trends, 17 : 306-7.
- BECKMAN, M (1983). Library buildings in the network environment. Journal of academic librarianship, 9 (5) : 281-84.
- BECHTEL, J.M (1985). Academic professional status : an alternative for librarians. Journal of academic librarianship, 11 (5) : 289-92.
- (1986). Conversation a new paradigm for librarianship? College and research libraries, 47 (3) : 219-24.
- BEHR, A.L (1983). Empirical research methods for the human sciences : an introductory text for students of education, psychology and the social sciences. Durban : Butterworth.
- BENDER, A (1979). Allocation of funds in support of development in public libraries. Library resources and technical services, 23 (1) : 45-51.
- BENGE, R.C (1979). Cultural crisis and libraries in the third world, London : Bingley.
- BENTLEY, S. & FARRELL, D (1984) Beyond retrenchment : the reallocation of library materials budget. Journal of academic librarianship, 10 (6) : 321-5.
- BERRY, M.F (1979). Higher education in the United States : the road ahead. College and research libraries, 40 (2) 103-8.
- BIGGS, M (1982). Sources of tension and conflict between librarians and faculty. Journal of higher education, 52 : 182-201.
- (1985). Replacing the fact drop-in with gourmet information service : a symposium. Journal of academic librarianship, 11 (2) : 68-78.

- BIRD, C. P. & PUGLISI, D.D (1984). Noise reduction in an undergraduate library. Journal of academic librarianship, 10 (5) : 272-7.
- BIXLER, P (1974). 'CC' is dead - long live the core collection. In : Farber, E. I, & Welling, R. eds. the academic library : essays in honour of Guy R. Lyle. Metuchen [N.J.] : Scarecrow, p. 40-149.
- BLUM, M.L & FOOS, P.W(1986). Data gathering : experimental methods plus. New York : Harper and Row.
- BOAZ, M (1975). Academic libraries : some issues - no answers. Journal of academic librarianship, 1 (4) : 15-8.
- BOGUE, E.G. & BROWN, W (1982). Proforma incentives for state colleges. Harvard business review, 60 : 123-8.
- BOLTON, E.C (1971). Response of library management to changing modes of university governance and control. In : Association of research Libraries The university in the seventies. Colorado : The Association, p. 11-23.
- BOLNER, M ed. (1975). Planning and developing a library orientation program. Ann Arbor (Mich.) : Pierian Press.
- BONN, G.S (1974). Evaluation of the collection. Library trends, 22 (3) : 265-304.
- BOOZ, ALLEN & HAMILTON, Inc.(1970). Problems in university library management. Washington (D.C.) : Association of Research Libraries.
- (1973). Orgainzation and staffing of the libraries of Columbia University. Washington (D.C.) : Association of Research Libraries.
- BORCHARDT, D.H (1977). Library resources for teaching and research in the humanities and social sciences. In : Bryan, H & Greenwood, G eds. Design for diversity. St Lucia : University of Queensland Press, p. 147-68.
- BOSHOFF, M. C (1967). 'n Pragmatiese ondersoek na die biblioteekgebruik van voorgraadse studente aan die Universiteit van Suid-Afrika - na aanleiding van hul literatuurbehoeftes. UNISA, M.A.
- BOSS, R.W (1980). The library security system. Library Journal, 107 : 683.
- BRADEN, I A (1970). The undergraduate library. Chicago : ALA. (ACRL. Monographs; no. 31).
- (1978). Conclusions. Reprinted in : Wilkinson, B.R. ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 384-402.
- BRADEN I.H      see also HOADLEY, I B.

- BRANSCOMB, H (1940). Teaching with books : a study of college libraries. Chicago : Association of American Colleges.
- BREWER, J.G. & HILLS, P.J (1976). Evaluation of reader instruction. Libri, 26 : 56.
- BREGZIS, R (1965). The Ontario new universities library project-an automated bibliographic data control system. College and research libraries, 26 (6) : 495-508.
- BREIVIK, P.S (1982). Planning the library instruction program. Chicago : American Library Association.
- BRICE, J. (1978). The college library. New library world, 79 (935) : 85-7.
- BRINKMAN, P.T (1984). Formula budgeting : the fourth decade. In : Leslie, L.L ed. Responding to new realities in funding. San Francisco : Jossey Bass.
- BROADUS, R. N (1985). A proposed method for eliminating titles from periodical subscription lists. College and research libraries, 46 (1) : 30-5.
- BROOK-NORRIS, S B (1986). The Johannesburg Reference Library and the crisis in black education. South African journal for library and information science, 54 (4) : 200-2.
- BROOKS, T.A (1984). Using time-series regression to predict academic library circulations. College and research libraries, 45 (6) : 501-5.
- BRUNT, A.G (1986). Elektroniese publikasie as inligtingsmedium. South African journal of library and information science, 54 (2) : 61-8.
- BRYAN, H (1966). A critical survey of university libraries and librarianship in Great Britain. Adelaide : Libraries Board of South Australia.
- & HEAN, E.L (1970). The function of the library in a college of advanced education. Sydney : Commonwealth Department of Science and Education.
- (1976). University libraries in Britain : a new look. London : Bingley.
- & GREENWOOD, G eds. (1977). Design for diversity : higher education and research in Australia. St Lucia (Queensland) : University of Queensland Press.
- BUCK, P (1964). Libraries and universities : addresses and reports. Cambridge (Mass.) : Belknap Press.
- BUCKLAND, M.K (1975). Book availability and the library user. New York : Pergamon Press.

- (1983). Library services in theory and context. New York : Pergamon Press.
- BUDD, J. & DICARLO, M (1982). Measures of user evaluation at 2 academic libraries : prolegomena. Library research, 4 (1) : 71-84.
- BUDLINGTON, W.S (1976). To enlarge the sphere of human knowledge : the role of the independent research library. College and research libraries, 37 (4) : 299-315.
- BUNDY, M.L. & WASSERMAN, P (1968). Professionalism reconsidered. College and research libraries, 29 : 5-26.
- BURKE, R.A (1970). The separately-housed undergraduate library. College and research libraries, 31 (6) : 399-402.
- BUSHNELL, G.H (1951). Reference work in university libraries. In : Stewart, J.D. The reference librarian in university, municipal and specialized libraries. London : Grafton.
- BUTLER, P ed [1943]. The reference function of the library. Chicago : University of Chicago Press.
- BYRD, C.K (1966). Subject specialists in a university library. College and research libraries, 27 (3) : 191-3.
- CALLAGHAN, P.M (1976). Academics and librarians. Australian academic research libraries, 7 (3) : 171-4.
- CAMMACK, F.M., DECOSIN, M. & ROBERTS N (1979). Community college library instruction : training for self-reliance in basic library use. Hamden [Conn.] : Linnet Books.
- CAMPBELL, D.E. & SCHLECHTER, T.M (1979). Library design influences on user behaviour and satisfaction. Library quarterly, 49 (1) : 26-41.
- CANADIAN ASSOCIATION OF COLLEGE AND UNIVERSITY LIBRARIES. University Libraries. University Library Standards Committee. Guide to Canadian university library standards. Report of the university standards committee. The Association, June 1965.
- CAREY, R.J.P (1971). Making libraries easy to use : a systems approach. Library association record, 73 : 132-5.
- CARLSON, D & MILLER R.H (1984). Librarians and teaching faculty : partners in bibliographic instruction. College and research libraries, 45 (6) : 483-91.
- CARLSON, D (1986). Wanted : computer-wise librarians, not micro-computer hobbyists. Journal of academic librarianship, 12 (2) : 97-8.
- CARMACK, B & LOEBER, T (1971). The library reserve systems-another look. College and research libraries. 32 : 105-9.



- CARPENTER, C A (1978). The Lamont catalog as a guide to book selection. Reprinted in Wilkinson, B.R ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 71-4.
- CASSELL, J (1978). The University of Texas Undergraduate Library collection. In : Wilkinson, B.R ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 165-9.
- CHIANG, K.S (1985). Don't join them, lead them. Journal of academic librarianship, 11 (5) : 273-4.
- CHICAGO UNIVERSITY GRADUATE LIBRARY SCHOOL (1954). The function of the library in the modern college : the 19th annual conference of the Graduate Library School June 14-18, 1954. Chicago : University of Chicago Press.
- CICOUREL, A.V (1964). Method and measurement in sociology. New York : The Free Press of Glencoe.
- CIESLICKI, D.H (1982). A new status model for academic librarians. Journal of academic librarianship, 8 (2) : 76-81.
- CILLIERS COMMITTEE (1961). see SOUTH AFRICA (Republic) (1961).
- CLAPP, V.W & JORDAN, R.T (1965). Quantitative criteria for adequacy of academic library collections. College and research libraries, 26 (5) : 371-80.
- CLARK, D & HARRIS, C (1978). Can users be instructed by package? Report : encouraging. Library association record, 80 (6) : 279-81.
- (1979). Helping librarians to help their users. Aslib proceedings, 32 : 363-74.
- (1980). User education in polytechnic libraries. (Unpublished paper).
- CLARKE, C (1977). The student, In : Coping with cuts. Proceedings of a conference held at Itolborn Library, 13th July 1977. London.
- CLAYTON, H (1965). An investigation of various social and economic factors influencing student use of one college library. University of Oklahoma, D. Phil.
- COBLANS, H (1974). Librarianship and documentation : an international perspective. London : A. Deutsch.
- COETZEE, C.J.S (1978). The education of whites in the Republic of South Africa. Pretoria : HSRC (IN -32).
- COLENBRANDER, H (1984). Subject reference services in Britain, West Germany and at the University of South Africa : some reflections. South African journal of library and information science, 52 (1) : 23-7.

- COMMAGER, H S (1970). Problems of the university library. Library college journal, 3 (4) : 44-52.
- COMMITTEE ON HIGHER EDUCATION (1963). Higher education : report of the committee appointed by the Prime Minister under the chairmanship of Lord Robbins 1961-63. Cmnd. 2154, p. 151-2.
- COOK, M.K (1981). Rank, status and contribution of academic librarians as perceived by the teaching faculty at Southern Illinois University, Carbondale. College and research libraries, 42 (3) : 214-23.
- COOPER, J.M (1986). Financing academic libraries. College and research libraries, 47 (4) : 354-9.
- COOPER, N (1976). Library instruction at a university-based information center : the informative interview. Research quarterly, 15 (3) : 233-240.
- COWLEY, J ed. (1975). Libraries in higher education : the user approach to services. London : Bingley.
- CRASTER, Sir E (1952). History of the Bodleian Library, 1845-1945. Oxford : Clarendon Press.
- CRETH, S (1985). Reactions to 'defining the academic librarian'. College and research libraries, 46 (6) : 469-77.
- CROSSLEY, C.A (1980). User education in university library. (Unpublished paper).
- CULLEY, J.D HEALY, D.F & CUDD K.G (1977). Business students and the university library : an overlooked element in the business curriculum. Journal of academic librarianship, 2 (6) : 293-6.
- DALE, D.C (1977). The community college library in the mid-1970's. College and research libraries, 38 (5) : 404-11.
- (1977). Questions of concern : library services to community college students. Journal of academic librarianship, 3 (2) : 81-4.
- DANTON, J.P (1963). Book selection and collections : a comparison of German and American university libraries. New York : Columbia University Press.
- DASH, U (1977). The self-guided library tour. Australian academic research libraries, 8 (1) : 33-8.
- DAVIDSON, D.C (1969). Significant developments in university library buildings. Library trends, 18 (2) : 125-37.
- DAVIDSON, R., THORSON, C.C. & STINE, D (1983). Faculty status for librarians : querying the troops. College and research libraries, 44 (6) : 414-20.
- DAVINSON, D (1965). Academic and legal deposit libraries : an examination guidebook. London : Bingley.

- DAVIS, J.R (1975). The new students : what they need. College and research libraries, 36 : 216-21.
- (1975). The changing role of the undergraduate library in universities. In : Josey, E.J ed. New dimensions for academic library service. Metuchen : Scarecrow Press.
- (1978). Coping - an Ugli way of life. Reprinted in Wilkinson, B.R ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 308-22.
- DE ANDRADE LIMA, M.L. Intercommunicagao eutre usuários de uma biblioteca universitaria. [Intercommunication between users of a university library. In : Revista da Escola Biblioteconomia da universidade federal de Minas gerais, 7 (1) : 90-104.
- DE GROOT, A.D (19 ). Methodology : foundations of inference and research in the behavioural sciences. The Hague : Mouton.
- DENNISON, L.C (1978). The organization of library and media services in community colleges. College and research libraries, 39 (2) : 123-9.
- DERVIN, B (1977). Useful theory for librarianship : communication not information. Drexel library quarterly, 13 (3) : 16-32.
- DE VLEESCHAUWER, H.J (1963). The university library. Mousaion, 60 : 87-8.
- (1967). Die ontwikkeling van die studie - biblioteek in die weste. Kaapstad : Academica.
- DE WIT, L. HAIGH, A. & HURD, J (1981). Library seminars : keeping faculty informed. College and research libraries news, 42 (9) : 326-7.
- DILLON, W (1975). Organizing the academic library for instruction. Journal of academic librarianship, 1 (4) : 4-7.
- DIX, W (1956). Undergraduates do not necessarily require a special facility. College research libraries, 17 (2) : 148-50.
- DIX, W.S (1970). [William S Dix interviewed by Richard H Logsdon]. In : Lyle, G.R. The Librarian speaking : interviews with university librarians. Athens (Ga.) : University of Georgia Press. p. 13-27.
- (1978). Undergraduate libraries. In : Wilkinson, B.R ed. Reader in Undergraduate Libraries. Englewood (Colo.) : Information Handling Services, p. 89-91.
- DOLAN, J & BARRETT, J (1987). Libraries and educational guidance : a partnership for quality. Library association record, 89 (7) : 330-2.

- DOUGHERTY, R.M. & BLOMQUIST, L (1974). Improving access to library resources : the influence of organization of library collections, and of user attitudes toward innovative services. Metuchen (N.J.) : Scarecrow Press.
- DOWNS, R.B. & HEUSSMAN, J. W (1970). Standards for university libraries. College and research libraries, 31 (1) : 28-35.
- (1976). The role of the academic librarian, 1876-1976. College and research libraries, 37 (6) : 491-502.
- DRAKE, M.A (1976). Forcasting academic library growth. College and research libraries, 37 (1) : 53-9.
- DUDLEY, M (1972). Teaching library skills to college students. Advances in librarianship, 3 : 83-105.
- DUDLEY, M.S (1978). Library instruction notebook : a self-directed course in the use of UCLA's College Library. Los Angeles : College Library, University of California.
- DUNLAP, C.R (1976). Library services to the graduate community : the University of Michigan. College and research libraries, 37 (3) : 247-51.
- DUNN, K (1986). Psychological needs and source linkages in undergraduate information - seeking behaviour. College and research libraries, 47 (5) : 475-81.
- DUREY, P (1973). University library services to undergraduates. International library review, 5 : 321-7.
- DURFEE, L.J (1986). Student awareness of reference services in a liberal arts college library. Library quarterly, 56 (3) : 286-299.
- DURRANCE, J.C (1986). The influence of reference practices on the client - librarian relationship. College and research libraries, 47 (1) : 57-67.
- DU TOIT COMMITTEE (1944). SOUTH AFRICA (Republic). (1944).
- DYSON, A.J (1975). Organizing undergraduate library instruction : the English and American experience. Journal of academic librarianship, 1 (1) : 9-13.
- EAVE, R.E.B (1979). Considerations requiring investigation in the allocation of funds for library materials at the University of Cape Town. University of Cape Town, M.A.
- (1984/85). The evolution of allocation guidelines at UCT Libraries. Jagger journal, 5 : 66-9.
- EDELMAN. H (1976). Redefining the Academic library. Library journal, 101 (1) : 53-6.

- (1984). Research library collections in a changing universe : four points of view. College and research libraries, 45 (3) : 214-24.
- & TATUM, G.M (1976). The development of collections in American university libraries. College and research libraries, 37 (3) : 222-45.
- EDWARDS, H. M (1986). Wits introduces magnetic cards for photocopying machines. SAILIS newsletter, 6 (1/2) : 5.
- (1987). Academic library building planning and design : an overview South African journal of library and information science, 55 (1) 16-21.
- EHIKAMENOR, F.A (1983). A formula for allocating book funds. The search for simplicity and flexibility. Libri, 33 (2) : 148-61.
- EISENBACH, E (1978). Bibliographic instruction from the other side of the desk. Research quarterly, 17 (4) : 312-6.
- EKPE, F. C (1979). The colonial situation and library development in Nigeria. International library review, 11 : 5-8.
- EKSTEEN, F (1981). A management tool for technikons. Opvoeding en kultuur, 4 (2) : 33-5.
- ELKINS, K.C (1954). Foreshadowing of Lamont : student proposals in the nineteenth century. Harvard library bulletin, 8 :42.
- ELLSWORTH, R.E (1968). Planning the college and university library building : a book for campus planners and architects. 2nd ed. Boulder (Colo.) : Pruett Press.
- (1973). Planning manual for academic library buildings. Metuchen [N.J.] : Scarecrow Press.
- EMDAD, A.A & ROGERS, A.R (1978). Library use at Pahlavi University. College research libraries, 39 (6) : 448-55.
- ENCYCLOPAEDIA OF LIBRARY AND INFORMATION SCIENCE. see KENT, A. & LANCOUR, H eds. (1968).
- ENGLE. M.O (1986). Librarianship as calling : the philosophy of college librarianship. Journal of academic librarianship, 12 (1) : 30-2.
- ENGLISH, T.G (1983). Librarian status in the eighty-nine academic institutions of the Association of Research Libraries. College and research libraies, 44 : 199-211.
- (1984). Administrators' views of library personnel status. College and research libraries, 45 (3) : 189-94.
- ERICKSON, E.W (1961). College and university library surveys : 1938-1952. Chicago : ALA. (ACRL, Monographs v. 25).

- EVARD, C & WADDINGTON, C.C (1971). The undergraduate survey : its role in changing patterns of reference service. Drexel library quarterly 7 (3/4) : 351-7.
- EXON, A (1978). Getting to know the user better. Aslib proceedings. 30 (10/11) : 362-4.
- FAULKNER-BROWN, H (1979). The open plan and flexibility. In : IATUL proceedings, 11.
- FAIRHOLM, G.W (1970). Essentials of library manpower budgeting. College and research libraries, 31 : 332-40.
- FAIRHURST, H (1965). Accommodating the library in the new university. Aslib proceedings, 17 (4) : 107-11.
- FARBER, E I (1974). Library instruction throughout the curriculum : Earlham College program. In : Lubans, J Educating the library user. New York, Bowker, p. 145-62.
- & WELLING, R (1974). The academic library, essays in honour of G.R. Lyle. Metuchen [N.J.] : Scarecrow Press.
- FERMAN, G. S. & LEVIN, J (1975). Social science research : a handbook for students. New York : Wiley and Sons.
- FIELDING, F.D.O (1977). Some aspects of administration and management . In : Bryan, H & Greenwood, G eds. Design for diversity. St Lucia : University of Queensland Press, p. 367-412.
- FJALLBRANT, N (1973). The use of tape/slide guides in library instruction. Tidskrift för dokumentation, 29 (5) : 116-25.
- (1974). User instruction in the libraries of the technological universities in Scandinavia : some recent developments. IATUL proceedings, 7 (2) : 54-9.
- (1975). A comparison of user instruction in Scandinavian and British academic libraries. Chalmers University of Technology transactions, 337.
- (1976). Teaching methods for the education of the library user. Libri, 26 (4) : 252-67.
- (1977a). Evaluation in a user education programme. Journal of librarianship, 9 (2) : 83-95.
- (1977b). Library user education and the effectiveness of library performance. IATUL, 9 : 67-76.
- (1977c). Planning programmes of library user education. Journal of librarianship, 9 (3) : 199-211.
- & STEVENSON, M (1978). User education in libraries. London : Bingley.

- FORD, B.J (1986). Reference beyond (and without) the reference desk. College and research libraries, 47 (5) : 491-4.
- FORD, G (1973). Research in user behaviour in university libraries. Journal of documentation, 29 : 85-106.
- FORD, J.E (1982). The natural alliance between librarians and english teachers in course-related library use instruction. College and research libraries, 43 (5) : 379-84.
- FORD, V (1985). P R : the state of public relations in academic libraries. College and research libraries, 46 (5) : 395-401.
- FOSKETT, A.C (1985). What are we going to do when there aren't any more books? Australian academic and research libraries, 13 : 43-9.
- FREIDES, T (1983). Current trends in academic libraries. Library trends, 31 : 466-7.
- FRICK, E (1975). Information structure and bibliographic instruction. Journal of academic librarianship, 1 (4) : 12-4.
- (1982). Teaching information structure : turning dependent researchers into self-teachers. In : Oberman, C ed. Theories of bibliographic education : designs for teaching. p. 197-205.
- FUHLROTT, R (1986). Underground libraries. College and research libraries, 47 (5) : 238-62.
- FUSSLER, H.H (1953). Acquisition policy : larger university libraries. College and research libraries, 14 : 360-65.
- FUSSLER, H ed. (1954). The function of the library in the modern college. Chicago : University of Chicago Press.
- GALTUNG, J (1969). Theory and methods of social research. London : Allen and Unwin.
- GAPEN, D.K (1984). Myths and realities : university libraries. College and research libraries, 45 (5) : 350-61.
- GARDNER, C.A (1985). Book selection policies in the college library : a reappraisal. College and research libraries, 46 (2) : 140-6.
- GARLOCH, L.A (1962). Urban university libraries. In : Library trends, 10 : 449-51.
- GEAHIGAN, P (1981). Online searching and undergraduate students. In : Lunin, L.F., Henderson, M. and Wooster, H eds. The information community : an alliance for progress - proceedings of the 44th ASIS Annual Meeting 1981. Vol. 18 Washington D.C., October 25-30, 1981. White Plains (N.Y.): Knowledge Industry Publications Inc. for the American Society for Information Science, 1981. p. 22-4.

- GELFAND, M.A (1971). University libraries for developing countries. Paris : UNESCO.
- GENAWAY, D.C & STANFORD, E.B (1977). 'Quasi-departmental libraries. College and research libraries, 38 (3) : 187-194.
- GERRYTS, E.D (1977). Die biblioteekdiens aan die universiteit van Pretoria. Skool biblioteek /school library, 9 (2) : 12-6.
- & DE BRUIN H (1987). Rasionalisasie en samewerking ten op sigte van versamelingsbou en documentlewing deur universiteitsbiblioteke. Deel 1 : Durban IUB.
- GISTITIN, C (1977). The reserve collection. Australian academic and research libraries, 8 (1) : 39-41.
- GLOSSOP, M. (1978). Sociological ideas and librarianship. New library world, 79 (932) : 25-8.
- GORE, D (1969). Teaching bibliography to college freshmen. Educational forum, 34 : 111-17.
- GOULD, D.P (1985). Measuring levels of work in academic libraries. College and research libraries, 46 (3) : 236-48.
- GOUKE, M.N. & PEASE, S (1982). Title searches in an online catalog and a card catalog. Journal of academic librarianship, 8 (3) : 137-43.
- GOVAN, J.F (1962). This is, indeed, the heart of the matter. College and research libraries, 23 : 467-72
- GRANT, R.S (1971). Predicting the need for multiple copies of books. Journal of library automation, 4 (2) : 64-71.
- GRATION, S.U. & YOUNG, A.P (1974). Reference - bibliographers in the college library. College and research libraries, 35 (1) : 28-34.
- GREENFIELD, L., JOHNSTON, S. & WILLIAMS, K (1986). Educating the world : training library staff to communicate effectively with international students. Journal of academic librarianship, 12 (4) : 227-31.
- GREENWOOD, G (1977). Policy formation and library experimentation in Australia and other western societies. In : Bryan, H & Greenwood, G eds. Design for diversity. St Lucia : University of Queensland, p 537-641.
- GRIFFEN, L.W & CLARKE, J. A (1972). Orientation and instruction in use of the university library : a case study. College and research libraries, 33 (11) : 467-72.
- GROGAN, D (1979). Practical reference work. London : Bingley.
- GUPTA, S.D (1965). University libraries and educational development in India. In : Sen, N.B. ed. Development of libraries in New India. New Delhi : New Book Society of India, p. 67-71.



- GUSKIN, A.E., STOFFLE, C.J. & BARUTH, B.E (1984). Library future shock : the microcomputer revolution and the new role of the library. College and research libraries, 45 (3) : 177-83.
- GWINN, N.E. & MOSHER, P. H (1983). Coordinating collection development : the RLG Conspectus. College and research libraries, 44 (2) : 128-40.
- GWINN, S.E (1978). The College Library at the University of Chicago. In : Wilkinson, B.R. ed. Reader in undergraduate libraries. Eglewood (Colo.) : Information Handling Services, p. 81-4.
- HAAG, D.E (1977). Library facilities and services for the university researcher. Potchefstroom University for CHE, M. Bibl.
- HAAK, J.R (1970). Goal determination and the undergraduate library. San Diego : University of California. (Eric reports).
- (1971). The undergraduate library : goal determination. Library journal, 96 (9) : 1572-8.
- HALL, A.W (1977). One use of audio-cassettes for library instruction. Education library bulletin, 20 (1) : 29-31.
- HAMEL, G.A (1976). General introduction to the IATUL conference theme. IATUL, 9 : 7-8.
- HAMMER, S (1982). see Person, R (1982).
- HAMMOND, N (1975). Teaching library use. In : Cowley, J ed. Libraries in higher education : the user approach to services. London : Bingley, p. 83-101.
- HARBOLD, W.H (1961). Policy making and control in college and university libraries. In : Kroll, M. College, university and special libraries. Seattle : University of Washington, p. 9-55.
- HARDESTY, L (1975). The academic library : unused and unneeded? Library scene, 4 : 14-6.
- LOVRICH, N. P & MANNON, J (1979). Evaluating library-use instruction. College and research libraries, 40 (July) : 309-17.
- (1981). Use of library materials at a small liberal arts college. Library research, 3 (3) : 261-82.
- (1986). Book selection for undergraduate libraries. Journal of academic librarianship, 12 (1) : 19-25.
- LOVRICH, N.P. & MANNON, J (1982). Library-use instruction : assessment of the long-term effects. College and research libraries, 43 (1) : 38-46.

- & WRIGHT, J (1982). Student library skills and attitudes and their change : relationships to other selected variables. Journal of academic librarianship, 8 (4) : 216-20.
- HARO, R. P (1967). Book selection in academic libraries. College and research libraries, 28 : 104-6.
- HARRER, G.A (1957). Library expenditures : an examination of their distribution. College and research libraries, 18 : 210-2.
- HARRIS, C (1977). Educating the user : travelling workshop experiment. Library association record, 79 (7) : 359-60.
- (1977). Illuminative evaluation of user education programmes. Aslib proceedings, 29 (10) : 348-62.
- (1978). Project methods and the need for library user instruction. Assistant librarian, 71 ( 7 & 8) : 78-80.
- HARRISON, E.C (1960). Current reference practices in four university libraries in North carolina. Chapel Hill, North Carolina University, M. Sc.
- HARROP, C (1981). The information needs of undergraduates project : some preliminary findings. Crus news, 11 : 2-6.
- (1982). The information needs of undergraduates project : year 3. Crus news, 15 : 3.
- (1982). Sources of information used by students to carry out work set for tutorials : some findings from the Information Needs of Undergraduates Project. Crus news, 14 : 3-5.
- HARWOOD. J. A (1982). see Person, R (1982).
- HARVARD-WILLIAMS, P (1982). International standards. Library trends, 31 (1) : 173-85.
- HAWGOOD, J. & MORLEY, R (1970). Project for evaluating the benefits from university libraries : final report. University of Durham.
- HEIST, P (1978). Students in the 70's - caught in the academic maelstrom. In : Wilkinson, B.R. ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 291-307.
- HELLEVIK, O (1984). Introduction to casual analysis : exploring survey data by crosstabulation. London : Allen & Unwin.
- HELLINGA, R.R (1979). Departmental acquisitions policy for small college libraries. Library acquisitions, 3 : 81-4.
- HENDRICK, C (1986). The university library in the twenty-first century. College and research libraries, 47 (2) : 127-31.

- HERRING, J.E (1978). Is seeing believing? Library skills and the audiovisual librarian. Audiovisual librarian, 4 (40) : 16-9.
- HEWITT, J.A (1984). Technical services in 1983. Library resources & technical services, 28 (3) : 205 -18.
- HIGHAM, N (1967). University libraries. In : Saunders, W.L. ed. British librarianship today. London : Library Association, p. 204-32.
- (1976). Undergraduates and books. In : Mann, P.H. Books and undergraduates. London : National Book League, p. 22-34.
- (1976). University libraries. In : Saunders, W.L. ed. British librarianship today. London : Library association, p. 204-32.
- HILDRETH, C.R (1982). Online public access catalogs : the user interface. Dublin (Ohio) : OCLC.
- HILL, F.E. & HAUPTMAN, R (1986). A new perspective in faculty status. College and research libraries, 47 (2) : 156-59.
- HINTON, M.O (1954). An evaluation of college and university library handbooks for students. [n.p.] : University of Rochester Press for the Association of College and Research Libraries.
- HIRSCH, R (1959). Evaluation of book collections. In : Yenawine, W. ed. Library evaluation. Syracuse, Syracuse University Press, p. 7-20.
- HOADLEY, I.B (1969). The undergraduate library - the first 20 years. San Diego : California University.
- (1970). see Braden, I.B. (1970).
- (1982). see Person, R (1982).
- (1985). Reaction to defining the academic librarian. College and research libraries, 46 (4) : 469-77.
- HODOWANEC, G. V (1978). An acquisition rate model for academic librarians. College and research libraries, 39 (6) : 439-47.
- (1983). Literature obsolescence, dispersion, and collection development. College and research libraries, 44 (6) 421-443.
- HOGAN, S.A (1980). Training and education of library instruction librarians. Library trends, 29 (1) : 105-26.
- HOLDEN, C (1987). Libraries stunned by journal price increases. Science, 236 : 908-9.
- HOLLEY, E.G (1983). Reaction to a brief ... Journal of academic librarianship. 9 (4) : 201-2.

- (1985). Defining the academic librarian. College and research libraries, 46 (6) : 462-68.
- HOLLICKY, B. H (1984). Collection development vs. resource sharing : the view from the small academic library. Journal of academic librarianship, 10 (3) : 146-7.
- HOLLOWAY COMMISSION. (1951). see UNION OF SOUTH AFRICA. (1951).
- HORN, A. H (1966). Report of a brief study of the El Camino College library. El Camino : El Camino College.
- HORNY, K (1971). The undergraduate library : building North-Western's core. Library journal, 96 (9) : 1580-3.
- (1982). Online catalogs : coping with choices. Journal of academic librarianship, 8 (1) : 14-9.
- HORRELL, M (1968). Bantu education to 1968. Johannesburg : SAIRR.
- HOSTROP, R. W (1966). The relationship of academic success and selected other factors to student use of library materials at College of the desert. UCLA, Ph. D.
- (1968). Teaching and the community college library. Shoe String Press.
- HUMAN SCIENCES RESEARCH COUNCIL (1981). Investigation into education : report of the work committee : education financing. Pretoria : HSRC.
- HUMPHREYS, K. W (1970). Standards in university libraries. Libri, 20 (1/2) : 144-55.
- HYATT, J.A., SHULMAN, C.H. & SANTIAGO. A.A (1984). Reallocation : strategies for effective resource management. Washington D.C. National Association of College and university business officers.
- IFIDON, S.E (1978). The objectives of African university libraries : the Nigerian experience. International library review, 10 (1) : 43-50.
- IFLA (1985) see INTERNATIONAL FEDERATION OF LIBRARY ASSOCIATIONS (1985).
- INTERNATIONAL FEDERATION OF LIBRARY ASSOCIATIONS (1985). Standards for university libraries. [n.p.] : IFLA.
- ISAAC, F (1983). Librarian, scholar, or author? The librarian's dilemma. Journal of academic librarianship, 9 (4) : 216-20.
- IVEY, D.L (1986). Attitudes towards the library and information profession among practising librarians and information workers in the Western Cape. University of Cape Town. M.A.

- JACOB, M.E.L (1977). Automation and technology today and tomorrow. In : Bryan, H & Greenwood, G eds. Design for diversity. St Lucia : University of Queensland, p. 455-90.
- JACOBSON, G.N. & ALBRIGHT, M.J (1983). Motivation via videotape : key to undergraduate library instruction in the research library. Journal of academic librarianship, 9 (5) : 270-5.
- JAIN, A.K (1966). Sampling and short-period usage in the Purdue Library. College and research libraries, 27 : 211-8.
- JEFFERSON, G. & SMITH-BURNETT, G.C.K. eds. The college library : a collection of essays. London : Bingley.
- JEWELL, T.D (1982). Student reactions to a self-paced library skills workbook program : survey evidence. College and research libraries, 43 (5) : 371-8.
- JOHNSON, E.R (1974). The development of the subject - divisional plan in American university libraries. University of Wisconsin, Ph.D.
- JONES, N.E (1959). Books are being read; summary of a questionnaire on the use of the library at the University of California, Los Angeles. Los Angeles : University of California Library.
- (1971). The UCLA experience : an undergraduate library - for undergraduates! Wilson library bulletin, 45 (6) : 584-90.
- JORSTAD, A.L (1978). The role of libraries in Norwegian distance learning. Scandinavian public library quarterly, 11 (4) : 93-7.
- JOSEY, E.J (1969). The future of the black college library. Library journal, 94 (9) : 3019-69.
- (1971). The role of the academic library in serving the disadvantaged student. Library trends, 20 : 432-44.
- KASER, D (1976). A century of academic librarianship as reflected in its literature. College and research libraries, 37 (2) : 110-27.
- (1984). Twenty-five years of academic library building planning. College and research libraries, 45 (4) : 268-81.
- KASSES, C.D., TAYLOR, S.D. & JONES, C.L (1978). departmental libraries : curse or blessing? Bulletin of the Medical Libraries Association, 66 (2) : 177-84.
- KATZ, W.A (1969). Introduction to reference work. New York : McGraw-Hill. 2 vols.
- KEEVER, E.H & RAYMOND, J.C (1976). Integrated library instruction on the university campus : experiment at the University of Alabama. Journal of academic librarianship, 2 (4) : 185-7.

- (1978). Reassessment of the undergraduate library : a personal critique. Reprinted in : Wilkinson, B.R ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 412-20.
- KEMP, B.E., NOFSINGER, M.M. & SPITZER, A.M (1986). Building a bridge : articulation programs for bibliographic instruction. college and research libraries, 47 (5) : 470-4.
- KEMP, D.A (1979). Current awareness services. London : Bingley.
- KENNEDY, J. R (1970). Integrated library instruction. Library journal, 95 : 1450-3.
- KENT, A., & LANCOUR, H. eds. (1968). Encyclopaedia of library and information science, New York : Dekker, vols. 1-.
- KESTING, J.G (1967). Probleme verbonde aan die oprigting van 'n nuwe universiteitsbiblioteek II. South African libraries, 34 (4) : 147-52.
- (1971). The case for centralization. Libra, 6 (Sept. 1971) : 33-9.
- (1973). Geheelmens en biblioteek in opvoedkundige perspektief. (Inaugural lecture).
- (1980). South Africa, libraries in the Republic of. In : Encyclopedia for library information science, 28 : 129-259.
- KIRK, T.G (1974). Problems in library instruction in four-year colleges. In : Lubans, J ed. Educating the library user. New York : Bowker, p. 83-103.
- & KENNEDY, J.R. & VAN ZANT, N.P (1980). Structuring services and facilities for library instruction. Library trends, 29 (1) : 39-53.
- KIRKENDALL, C.A ed. (1979). Improving library instruction : how to teach and how to evaluate. Ann Arbor (Mich.) : Pierian Press.
- (1980). Library use education : current practices and trends. Library trends, 29 (1) : 29-37.
- KISH, L. (1979). Some statistical problems in research design. In : Social research : principles and procedures. edited by J. Bynner & K.M. Stribley. (1979). London : Longman.
- KNAPP, P.B (1959). College teaching and the college library. Chicago : American Library Association.
- 91966). The Monteith College Library experiment. New York : Scarecrow Press.
- (1970). The library, the undergraduate and the teaching faculty. San Diego : California University, University Library. (Eric reports).

- (1971). Guidelines for bucking the system : a strategy for moving toward the ideal of the undergraduate library as a teaching instrument. Drexel library quarterly, 7 (3/4) : 217-21.
- (1978). The library, the undergraduate and the teaching faculty. Reprinted in : Wilkinson, B. R. ed. reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 220-46.
- KNIGHT, D.M. & NOURSE, E.S eds. (1969). Libraries at large : tradition, innovation, and the national interest; the resource book based on the materials of the National Advisory Commission on Library. New York : Bowker.
- KNUTSON, G (1986). Does the catalog record make a difference? Access points and book use. College and research libraries, 47 (5) : 460-9.
- KOMITEE VAN UNIVERSITEITSHOOFDE. Onderkomitee vir universiteitsubsidie. Verslag van onderkomitee (benoem om die uitgawes op biblioteke in vergelyking met die werklike behoeftes van die universiteite te ondersoek) aan komitee van universiteitshoofde. (Potchefstroom) 1967.
- KOPPELMAN, C (1976). Orientation and instruction in academic art libraries. Special libraries, 67 (5/6) : 256-60.
- KOVATS, Z (1977). Management problems in university libraries. IATUL, 9 : 88-96.
- KROLL, M. ed. (1961). College, university and special libraries of the Pacific Northwest. Seattle : University of Washington. (Pacific Northwest Library Association. Library development project reports; v. 3).
- KUHN, W.B (1969). Undergraduate libraries in a university. Library trends, 18 (2) : 188-209.
- (1970). Planning the undergraduate library. San Diego : California University Library. (Eric reports).
- KWAKWA, M.A (1972). African libraries in search of an image. Library association record, 74 (4) : 72-3.
- LABURN, C (1984). User guidance and training. South African journal of library and information science, 52 (3) : 93-8.
- LANE, G (1966). Assessing the undergraduates' use of the university library. College and research libraries, 27 : 278-80.
- LAIDLAW, S (1982). see Person, R (1982).
- LAURENCE COMMISSION (1914). see UNION OF SOUTH AFRICA (1914).
- LAWRENCE, G. H (1980). The computer as an instructional device : new directions for library user education. Library trends, 29 (1) : 139-52.

- LEACH, R.C (1984). Library material price update. Library issues : briefings for faculty and administrators, 4 (January) : 1-2.
- LEONARD, J (1982). [Letter] to the Editor. Journal of academic librarianship, 8 (2) : 96.
- LESSING C.J.H (1970). Die finansiering van die Suid-Afrikanse universiteitsbiblioteek. Potchefstroom University for CHE. M.A. (Bibl).
- LEVETT, J.A (1977). Library? Resource materials centre? Library-college? In : Bryan, H. & Greenwood, G. eds. Design for diversity. St Lucia : University of Queensland Press, p. 345-68.
- LIEBAERS, H (1971). The western european university and research library in the next decade. In : Association of Research Libraries. The university library in the seventies. Colorado : The association, p. 40-9.
- LIEBERFELD, L (1983). The curious case of the library building. College and research libraries, 44 (4) : 277-82.
- LINE, M.B (1963). Student attitudes to the university library. Journal of documentation, 19 (3) : 100-17.
- & TIDMARSH, M (1966). Student attitudes to the university library : a second survey at Southampton University. Journal of documentation, 22 (2) : 123-35.
- (1967). Library surveys. London : Bingley.
- (1968). The functions of the university library. In : Saunders, W.L ed. (1968). University and research studies. Oxford : Pergamon, p. 148-58.
- (1971). Investigation into information requirements of the social sciences. Bath : Bath University of Technology.
- (1974). Information services in university libraries : introductory talk. In : Ayres, F.H. & Hall, J eds. Information services in university libraries. Bradford : SCONUL. p. 1-5.
- (1975). Demystification in librarianship and information science. In : Barr, K. and Line, M. : Essays on information and libraries. London : Bingley.
- LIPETZ, B.A (1970). user requirements in identifying desired works in a large library ; final report. New Haven (Conn.) : Yale university Library. (Eric reports).
- LIPOW, A.G (1976). Library services to the graduate community. College and research libraries, 37 (3) : 246-65.
- LOCKWOOD, D.L (1979). Library instruction : a bibliography. London : Greenwood Press.



- LODDER, N.M & FOKKER, D.W (1973). An investigation into the possible application of MARC records in South African libraries. South African libraries, 40 (4) ; 206-13.
- LOR, P.J (1981). Academic libraries. In : Jackson, M.M ed. International handbook of contemporary developments in librarianship. Westport. [Conn.] : Greenwood Press, p. 75-82.
- LOUGEE, W. P (1985). Turf vs role? Broadcasting the library's involvement. Journal of academic librarianship, 11 (5) : 270-1.
- LOUW, J.B.Z (1981). Grondslae van die finansiering van die outonome universiteite deur die sentrale owerheid. SAIPA : journal of public administration, 16 : 63-70.
- LOVETT, R.W (1978). The undergraduate and the Harvard Library 1877-1937. In : Wilkinson, B. R Reader in undergraduate libraries. Englewood (COLO.) : Information Handling Services, p. 9-23.
- LUBANS, J (1971). Nonuse of an academic library. College and research libraries, 32 : 362-7.
- (1974). Educating the library user. New York : Bowker.
- ed. (1978). Progress in educating the library user. New York : Bowker.
- LUDWIG, P (1972). Reader education programme in Macquarie University. (Background paper prepared for the seminar on Reader Education conducted by the University and College Libraries Section, Library Association of Australia. Hobart).
- LUNDY, F.A (1956). Library service to undergraduate college students. College and research libraries, 17 (2) : 143-8.
- LYLE, G.R (1961). The administration of the college library. 4th ed. New York : Wilson.
- (1970). The librarian speaking : interviews with university librarians. Athens, Ga. : University of Georgia Press.
- (1974). see Farber, E.I. & Welling, R (1974).
- LYMAN, R (1971). New trends in higher education : the impact on the university library. In : Association of Research Libraries. The university library in the seventies. Colorado : The Association, p. 3-10.
- LYNCH, M.J (1973). Trials, tactics and timing : some thoughts about library instruction programs. In : Lee, S.H ed. A challenge for academic libraries. Ann Arbor : Pierian Press.
- LYNCH B. P (1978). The changing environment of academic libraries. College and research libraries, 39 (1) : 10-4.

- (1982). University library standards. Library trends, 31 (1) : 33-47.
- & SIEBERT, K.S (1980). The involvement of the librarian in the total educational process. Library trends, 29 (1) : 127-37.
- McANALLY, A.M (1963). Budgets by formula. Library quarterly, 33 (2) : 159-71.
- (1978). Library service to undergraduates : a symposium, July 1, 1952; introductory remarks. In: Wilkinson, B.R. ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 79-80.
- McCARTHY, C (1985). The faculty problem. Journal of academic librarianship, 11 (2) : 142-5.
- McCARTHY, S.A (1978). Library provision for undergraduates in the United States. Reprinted in : Wilkinson, B.R. ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 352-55.
- McGRATH, W.E (1971). Correlating the subjects of books taken out and books used within an open-stack library. College and research libraries, 32 (4) : 280-5.
- McGRATH, W.E., SIMON, D.J. & BULLARD, E (1979). Ethnocentricity and cross-disciplinary circulation. College and research libraries, 40 (6) : 511-18.
- McINNIS, R.G (1978). New perspectives for reference service in academic libraries. Westport (Conn.) : Greenwood.
- McKEE, P (1981). "Weeding the Forest Hill branch of Toronto Public Library by the Slote method : a test case". Library research, 3 (3) : 284-301.
- MACKENNA, R.O (1964). Recent developments in university librarianship in Great Britain. Library trends, 12 (4) : 606-623.
- (1979). University library organization. In : Thompson, J ed. University library history. London : Bingley, p. 92-108.
- MACKENZIE, A.G (1969). Reader instruction in modern universities. Aslib proceedings, 21 (7) : 271-79.
- McLARTY, A.H (1985). "Secondary reading and the future". Journal for language teaching, 19 (1) : 36-44.
- McNIFF, P.J (1978). Lamont Library, Harvard College. In : Wilkinson, B.R ed. Reader in undergraduate libraries. Englewood : (Colo.) : Information Handling Services, p. 85-88.

- & WILLIAMS, E.E (1978). Lamont Library : the first year. Reprinted in : Wilkinson, B R ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 54-61.
- MAHER, W.J & SHEARER, B.F (1979). Undergraduate use patterns of newspapers on microfilm. College and research libraries, 40 (3) : 254-60.
- MALAN, S.I (1978). Library and information science : a general orientation. Durban : Butterworth.
- MALLEY, I (1978). Educating the special library user. Aslib proceedings, 30 : 365-72.
- (1978). Research into practice in user education : Art libraries, 3 (3) : 17-26
- MANN, P.H (1971). Methods of sociological enquiry. Oxford : Blackwell.
- (1974). Students and books. London : Routledge.
- ed. (1976). Books and undergraduates : proceedings of a conference held at Royal Holloway College, University of London 4th-6th July 1975. London : National Book League.
- MARSH, C (1982). The survey method : the contribution of surveys to sociological explanation. London : Allen & Unwin.
- MARSHALL, A.P (1977). This teaching/learning thing : librarians as educators. In : Poole, H. ed. Academic libraries by the year 2000. New York : Bowker.
- (1980). Introduction. Library trends, 29 (1) : 3-8.
- MARTELL, C (1985). Editorial : creative behavior in libraries. College and research libraries, 46 (4) : 293-94.
- MASON, E (1978). Underneath the oak trees : the Sedgewick Undergraduate Library at U.B.C. In : Wilkinson, B.R ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 185-97.
- MASSMAN, V (1972). Faculty status for librarians. Metuchen (N.J.) : Scarecrow.
- MEISTER, H (1977). "Use(r) studies as a means to upgrade library effectiveness". IATUL, 9 : 57-65.
- MELLON, C.A (1984). "Process not product in course-integrated instruction : a generic model of library research". College and research libraries, 45 (6) : 471-78.
- (1986). Library anxiety : a grounded theory and its development. College and Research Libraries, 47 (2) : 160-65.

- MELTZER, E (1982). (Letter) to the Editor. Journal of academic librarianship, 8 (1) : 34.
- MERRETT, C (1985). "SDI in an academic community". South African journal of library and information science, 53 (4) : 200-8.
- METCALF, K.D (1974). The undergraduate and the Harvard Library, 1937-1947. Harvard Library Bulletin, 288-305.
- (1965). Planning academic and research library buildings. New York : McGraw Hill.
- (1978a). The undergraduate and the Harvard Library, 1937-1947. Reprinted in : Wilkinson, B.R ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 24-38.
- (1978b) The Lamont Library II. Function. Reprinted in : Wilkinson, B.R ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 45-53.
- MENTZ, P & SCOTT, E.A (1981). A proposed staffing formula for Virginia's Academic libraries. College and research libraries. 42 : 127-133.
- MEWS, H (1970). Library instruction concerns people. Library association record, 72 (1) : 9-10.
- (1972). Reader instruction in colleges and universities : an introductory handbook. London : Bingley.
- MICHALAK, T.J (1976). The role of the subject specialist librarian. College & Research Libraries, 37 (3) : 257-65.
- MILLER, C & TEGLER, P (1986). "Online searching and the research process". College and research libraries, 47 (4) : 370-3.
- MILLER, W & ROCKWOOD, S eds. (1981). College librarianship. Metuchen (N.J) : Scarecrow.
- MILLER, W.L (1983). The survey method in the social and political sciences : achievements, failures, prospects. London : Pinter.
- MILLS, E (1968). The separate undergraduate library. College and Research Libraries, vol. 29, p. 144-56.
- MILSON-MARTULA, C (1985). The effectiveness of book selection agents in a small academic library. College and research libraries, 46 (6) : 504-10.
- MOFFETT, W.A (1984). Reflections of a college librarian : looking for life and redemption this side of ARL. College and research libraries, 45 (5) : 338-49.
- MONTANELLI, D.S & STENSTROM, P.F (1986). The benefits of research for academic librarians and the institutions they serve. College and research libraries, 47 (5) : 482-85.

- MOORE, B., MILLER, T.J & TOLLIVER, D.L (1982). The overlap : a study of duplication in the University of Wisconsin System Libraries. College and research libraries, 43 (1) : 14-21.
- MORAN, M (1978). The concept of adequacy in university libraries. College and research libraries, 39 (2) : 85-93.
- MOREHOUSE, W ed. (1965). Foreign area studies and the college library : bibliographies, reference service, acquisitions programs, and other activities and services for undergraduate librarians in African, Asian, Latin American and Russian studies. New York : University of the State of New York.
- MOREIN, P.G (1977). The academic library development program. College and research libraries, 38 (1) : 37-45.
- MORTON, B (1979). Beyond orientation : the library as place of education and the librarian as educator. Improving college and university teaching, 27 (4) : 161-3.
- MOSS, M.W (1966). Library service for undergraduates. In : Saunders, W.L ed. The provision and use of library and documentation services : some contributions from the University of Sheffield. Oxford : Pergamon Press, p. 85-113.
- MOSS, M.W (1978). Library service for undergraduates. Reprinted in : Wilkinson, B.R ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 356-83.
- MOUNT, E & FASANA, P (1972). An approach to the measurement of use and cost of a large academic reserach library system : a report of a study done at Columbia University libraries. College and Research Libraries, 33 (3) : 199-211.
- MULLER, H (1969). Master planning for university libraries. Library trends, 18 (2) : 138-49.
- MULLER, R.H (1970). The undergraduate library trend at large universities. Advances in librarianship, 1 : 113-32.
- MUNTHE, W (1939). American librarianship from a European angle : an attempt at an evaluation of policies and activities. Chicago : ALA.
- MURPHY, M & JOHNS, C.J (1977). Handbook of library regulations. New York : Dekker.
- MUSIKER, R comp. (1987). Guidelines to the copyright act no. 98 of 1978 (as amended) and the reproduction regulations. Johannesburg : University of the Witwatersrand Library.
- NACHMIAS, D & NACHMIAS, C (1976). Research methods in the social sciences. London : Arnold.
- NAISBITT, J (1984). Megatrends. New York : Warner.

- NELSON, J (1973). Faculty aware and attitudes toward academic library references services : a measure of communication". College and research libraries, 34 (September 1973) : 268-75.
- O'CONNELL, T.F (1970). Undergraduate library? Canadian library journal, 27, 278-82.
- OESCHGER, P.H (1973). Die taak van die fakbibliotekaris en sy plek in die organisasiestruktuur van spesiale verwysing na die universiteitsbiblioteek. Rand Afrikaans University, M. Bibl.
- OLAGOKE, D.O. (1975). The language proficiency of the students admitted into Nigerian Universities. West African journal of education, 19 (3) : 369-80.
- OLANIYAN, B.F, ARIKENBI, J.A & UGONNA, J.A (1975). Instructing students in the use of the library in the University of Lagos. Nigerian libraries, 11 (1 & 2) : 123-33.
- OLSON, L,M (1984). Reference service evaluation in medium-sized academic libraries : a model. Journal of academic librarianship, 9 (6) : 322-9.
- OLUM, P (1984). Myths and realities : the academic viewpoint I. College and research libraries. 45 (5) : 362-66.
- O'NEIL, R.M (1984). Academic libraries and the future : a president's view. College and research libraries, 45 (3) : 184-88.
- ONI-ORISONA, B.A (1972). Education-school libraries and Nigeria's development plan 1970-1974. Nigerian libraries, 8 (1) : 21-7.
- ORNE, J (1969). Financing and cost of university library buildings. Library trends, 18 (2) 150-65.
- (1970). The undergraduate library. Library journal 95 (12) p 2230-33.
- (1976). Academic library building's : a century in review. College and research libraries, 37 (4) : 316-31.
- ORTON, L & WISEMAN, J (1977). Library service to part-time students. Canadian library journal, 34 (1) : 23-7.
- OSBURN, G (1979). Some practical observations on the writing, implementation and revision of collection development policy. Library resources & technical services, 23 (1) : 1-15.
- OSUNDINA, O (1975). Improved accessibility and undergraduate use of the academic library. International library review, 7: 77-81.
- PAGE, B.S (1965). See PAGE,B.S. (1978).
- (1977). The library as educator. In : Bryan, H & Greenwood, G. eds. Design for diversity. St Lucia : University of Queensland Press, p 313-44.

- PALMER, P (1972). Computerising the card catalog in the university library : a survey of university requirements. Littleton (Colo.) : Libraries Unlimited.
- PARKER, V (1977). The relationship of medical school libraries to university library systems. Bulletin of the medical libraries association, 65 (4) p 451-3.
- PARRY, T (1967) see UNIVERSITY GRANTS COMMITTEE. (1967).
- PARSON, W.L (1984). User perspective on a new paradigm for librarianship. College and research libraries, 45 (5) : 370-73.
- PATERSON, E, R (1978). An assessment of college student library skills. Research quarterly, 17 (3) : 226-29.
- PAUSTIAN, P,P (1981). Collection size and interlibrary loan. Library research, 3 (4) : 393-400.
- PEACOCK, P.G (1972). The short loan collection in a university library. Journal of librarianship, 4 (2) : 130-36.
- PEARCE, B.L (1976). Tuition in library use as part of Open University preparatory courses. Library review, 25 (7) : 254-56.
- PEEL, B.B (1977). Canadian university libraries. In GARRY, L,S & GARRY C eds. Canadian libraries in their changing environment. Ontario : York University, Centre for Continuing Education, p 182-200.
- PEELE, D (1984). Librarians as teachers : some reality, mostly myth. Journal of academic librarianship, 10 (5) 267-71.
- PENNEY, B (1975). Planning library instruction. In : COWLEY, J ed. Libraries in higher education : the user approach to services. London : Bingley p 137-49.
- PENNINGTON, J (1985). Transitional technology and the small library. Library resources & technical services, 29 (2) : 125-31.
- PERKINS, D.L ed. (1979). Guidelines for collection development. Chicago : ALA.
- PERSON, R (1981). Long term evaluation of bibliographic instruction : lasting encouragement. College and research libraries, 42 (1) : 19.
- PERSON, R ed. (1982). University undergraduate libraries : nearly extinct or continuing examples of evolution? a symposium. Journal of academic librarianship, 8 (i) : 4-13.
- PHIPPS, S (1982). See PERSON, R (1982).

- PIELE, L.J, PRYOR, J & TUCKETT, H.W (1986). Teaching micro-computer literacy : new roles for academic librarians. College and research libraries, 47 (4) : 374-78.
- PINGS, V,M (1976). Reference services accountability and measurement. Research quarterly, 16 (2) : 120-23.
- PRITCHARD, E,P (1961). University extra-maral libraries. London : Library Association.
- RADCLIFFE, F.W (1972). Committees and librarianship. Libri, 22 : 235.
- (1980). The growth of university library collections in the United Kingdom. In : THOMPSON, J ed. University library history. London : Bingley, p 5-32.
- RADER, H (1977). Library instruction in the seventies : papers preserved at the sixth annual conference on library orientation for academic libraries held at Eastern Michigan University, May 13-14, 1976. Ann Arbor : Pierian Press. (Library Orientation Series : 7).
- RADEBE, T (1987). Personal experience of the entire system. SAILIS newsletter, 7 (8) : 9.
- RADER, H (1980) Reference services as a teaching function. Library trends, 95-103).
- RADFORD, N.A.O (1968). The problems of academic library statistics. Library quarterly, 38 (3) : 231-48.
- RADFORD, W (1977). Educating and training staff. In : BRYAN, H & GREENWOOD, G eds. Design for diversity. St Lucia : University of Queensland Press, p 491-36.
- RAFFEL, J,A & SCHISKO, R (1969). Systematic analysis of university libraries : an application of cost benefit analysis to the MIT Libraries. Cambridge (Mass.) : MIT Press.
- RAMBLER, L.K (1982). Syllabus study : key to a responsive academic library. Journal of academic librarianship, 8 (3) : 155-59.
- RANDALL, G.E (1976). Budgeting for libraries. Special libraries, 67 (1) : 8-12.
- REBMAN, E (1975). The undergraduate library. Library trends, 23 (1) : 391-399.
- REBMAN, E (1981). Undergraduate libraries. In : Encyclopedia for library and information science, 31 : 329-41.
- REDMOND, D.A, SINCLAIR, M.P & BROWN, E (1972). University libraries and university research. College and research libraries, 33 : 447-53.



- RENFORD, B.L (1978). A self-paced workbook program for beginning students. Journal of academic librarianship, 3 (4) : 200-3.
- RENFORD, B & HENDRICKSON, L (1980) Bibliographic instruction : a handbook. New York : Neal-Schuman Publishers.
- REVILL, D.H (1981). Academic librarians in colleges of further and higher education. Journal of librarianship, 13 (2) : 104-17.
- RHODES, R.G & EVANS, A.J (1977). The educational role of the university library and the provision of information services. IATUL, 9 : 11-25.
- RICE, B.A (1977). The development of working collections in libraries. College and research libraries, 8 (4) : 309-312.
- RICHARDS, T.F (1984). The online catalog : issues in planning and development. Journal of academic librarianship, 10 (1) : 4-9.
- RIDER, F (1944). The scholar and the future of the research library : a problem and its solution. New York : Hadham Press.
- RIGLYNE BY DIE TOEPASSING VAN SANSO-BOUNORME VAN BIBLIOTHEKE VAN SUID-AFRIKAANSE RESIDENSIELE UNIVERSITEITE. (1984). Opgestel deur Biblioteekdienste, UNISA en Pretoria (Unpublished).
- ROBERTS, A (1982). (Letter) to the Editor. Journal of academic librarianship, 8 (3) : 160-1.
- ROBERTS, N (1977). University libraries. In : WHATLEY, H.A ed. British librarianship and information science 1971-75. London : Library Association, p 146-54.
- (1980). Financing of university libraries in the United Kingdom. In : THOMPSON, J ed. University library history. London : Bingley, p 109-27.
- RODGERS, F (1982). See PERSON, R (1982).
- ROGERS, R.D & WEBER, D.C (1971). University library administration. New York. Wilson.
- ROGERS, S.J (1980). Research strategies : bibliographic instruction for undergraduates. Library trends, 29 (1) : 69-81.
- ROMEO, L.J (1980). Electronic theft detection systems : a survey conducted in 1976 part II : university libraries. Library & archival security. 3 : 1-23.
- ROSENBLUM, J (1985). Stay close to your desk and never go to sea. Journal of academic librarianship, 11 (2) : 72-3.
- ROSS, J (1983). Observations of browsing behavior in an academic library. College and research libraries, 44 (4) : 269-76.

- ROTHSTEIN, S (1953). The development of the concept of reference service in American libraries, 1850-1900. Library quarterly, 23 : 1-15.
- (1961). Reference service : the new dimensions for librarianship. College and research libraries, 22 : 14.
- ROWLEY, J.E & TURNER, C.M.D (1978). The dissemination of information. London : A. Deutsch.
- SAILIS NEWSLETTER (1986) 6 (12) : 1-2.
- (1987), 7 (7) : 1.
- SABINET bulletin, 2 (2) : 1-4.
- SAIRR SURVEY see SOUTH AFRICAN INSTITUTE FOR RACE RELATIONS.
- SALA see SOUTH AFRICAN LIBRARY ASSOCIATION.
- SALES, D.A.W (1981). The interrelatedness of censorship and book selection in South African public libraries. University of Cape Town, M.A.
- SANDHU, S.S (1975). The role of the subject specialist in a university library. Unesco bulletin for libraries, 29 (2) : 64-7.
- SANDOCK, M (1976). Student awareness and use of reference services in a large university library. University of Chicago, M.A.
- (1977). A study of university students' awareness of reference services. Research quarterly, 16 (4) : 284-96.
- Die SANSON-STELSEL (Bestuursinligtingstelsel vir naskoolse onderwysinrigtings in die RSA : historiese aanloop tot die Sanso-stelsel vir universiteite (1981). Opvoeding en kultuur, 4 (2) : 31-2.
- SAUNDERS, S., NELSON, H. & GEAHIGAN, P (1981). Alternatives to the shelflist measure for determining size of a subject collection. Library research, 3 (3) : 383-91.
- SAUNDERS, W.L ed. (1966). The provision and use of library and documentation services : some contributions from the University of Sheffield Postgraduate School of Librarianship. Oxford : Pergamon Press.
- (1967). Librarianship in Britain today. London : Library Association.
- (1968). University and research library studies; some contributions from the University of Sheffield Postgraduate School of Librarianship and Information Science. Oxford : Pergamon.

- (1976). British Librarianship today. London : Library Association.
- SAYLES, J.W (1984). Course information analysis: foundation for creative library support. Journal of academic librarianship, 10 (6) : 343-5.
- SCHAD, J.G (1979). Missing the brass ring in the iron city. Journal of academic librarianship, 5 (2) p 60-63.
- SCHAD, J.G., & ADAMS, R.L (1969). Book selection in academic libraries : a new approach. College and research libraries, 30 : 437-42.
- SCHMIDMAIER, D (1976). New University library buildings and library instruction. IATUL, 8 : 29-35.
- SCHWARTZ, D.G & EAKIN, D (1986). Reference service standards, performance criteria, and evaluation. Journal of academic librarianship, 12 (1) : 4-8.
- SIEBERT, W.F (1985). How libraries grow : a brief look backward (and forward). Journal of academic librarianship, 11 (1) : 19-23.
- SELLEN, M.K & JIROUCH, J (1984). Perceptions of library use by faculty and students : a comparison. College and research libraries, 45 (4) : 259-67.
- SEWELL, R.G (1983). Faculty status and librarians : the rationale and the case of Illinois. College and research libraries, 44 (3) : 212-222.
- (1984). Trash or treasure? Pop fiction in academic and research libraries. College and research libraries, 45 (6) : 450-61.
- SHARMA, R.N (1978). Bibliographic instruction : have we succeeded? Indian librarian, 32 (4) : 166-70.
- (1978). Bibliographic education : an overview. Libri, 29 : 329-41.
- SHARMA, R (1982). (Letter) to the Editor. Journal of academic librarianship, 8 (2) : 97.
- SHORES, L (1967). The undergraduate and his library. In : MARSHALL, J.D. The Library in the university : the university of Tennessee Library Lectures, 1949-1966. Hamden (Conn) : Shoe String Press.
- SHORES, L (1970). The college becomes a library. In his Library-college USA : essays on a prototype for an American higher education. Tallahassee (Fla.) : South Pass Press.
- SMALLEY, T.N (1977). Bibliographic instruction in academic libraries: questioning some assumptions. Journal of academic librarianship, 3 : 283.

- SMITH, D.L & BAXTER, E.G (1965). College library administration in colleges of technology, art, commerce and further education. London : OUP.
- SMITH, J.C (1977). Black academic libraries and research collections : an historical survey. Westpoint (Conn.) : Greenwood Press.
- SMITH, J.G (1981). The information requirements of scientists and engineers at academic institutions, with special reference to the university of Cape Town. University of Cape Town, M.A.
- SMITH, K.F (1986). Robot at the reference desk? College and research libraries, 47 (5) : 486-90.
- SMITH, M.M (1985). Cooperative collection development for rare books among neighboring (sic) academic libraries. College and research libraries, 46 (2) : 160-67.
- SMITH, R.H & GRANADE, W (1978). User and library failures in an undergraduate library. College and research libraries, 39 (6) : 467-73.
- SNOWBALL, G.J (1971). Survey of social sciences and humanities monograph circulation by random sampling of the stack. Canadian Library Journal, 28 : 352-61.
- (1972). (Letter) to the Editor. College and reserach libraries, 33 (6) : 487-8.
- SOMMER, R (1977). Reading areas in college libraries. Library quarterly, 38 (3) : 249-60.
- SOUTH AFRICA. Department of Education & Training. Appropriations and expenditure. Budget (for Black education). Educamus, 27 (5) : 2-3.
- SOUTH AFRICA (Republic) (1961). Committee of enquiry into the quinquennial revision of university subsidy formulae. Report 1964-1968. Pretoria, Government Printer 1963. Chairman : A.C. Cilliers.
- SOUTH AFRICA (Republic). (1944). Committee of enquiry into the quinquennial revision of university subsidy formulae. Report 1964-1968. Pretoria : Government Printer. (Du Toit report published originally as An. 26/1945).
- SOUTH AFRICA (Republic) (1974). Department of National Education. Main report of the Commission of inquiry into universities. Pretoria Government Printer (R.P. 25/1974). Chairman : The Hon. Mr. Justice J. van Wyk de Vries.
- SOUTH AFRICA (Republic) (1982). Department of National Education. Macro Euducation Policy Directorate. An investigation of the government financing of universities. Pretoria ; The Department (SAPSE 110).

- SOUTH AFRICA LIBRARY ASSOCIATION (1968). Standards for South African public libraries. 2nd rev. ed. Potchefstroom : SALA.
- SOUTH AFRICAN INSTITUTE FOR RACE RELATIONS (1971-1985). A survey of race relations. Johannesburg. SAIRR.
- SPENCER, R.C (1987). The teaching library. Library journal, 103 (10) : 1021-24.
- STANDARDS for college libraries. (1959). College and research libraries, 20 (4) : 274-80.
- STANDARDS for college libraries. (1975). College and research libraries news, 36 : 277-301.
- STEFANNACCI, M.A., WOOD, S.M. & HUFF, L (1977). Departmental libraries : why do they exist? Bulletin of the medical libraries association, 65 (4) : 433-37.
- STEVENSON, M.B (1976). Education in the use of information in university and academic environments. Aslib proceedings, 28 (1) : 17-21.
- STEVENSON, M (1977). Education of users of libraries and information services. Journal of documentation, 33 (1) : 53 - 78.
- STOAKLEY, R (1982). Presenting the library service. London : Bingley.
- STOAN, S.K (1984). Research and library skills : an analysis and interpretation. College and research libraries, 45 (2) : 99-109.
- STOICA, I (1977). The place and role of the library within the university system, 27 (4) : 325-40.
- STOFFLE, C. & PRYOR, J,M (1980). Competency-based education and library instruction. Library trends, 29 (1) : 55-67.
- SWANSON, P.K (1984). Planning as job enrichment. Journal of academic librarianship, 9 (6) : 350-1.
- SWITZER, D (1987). Problems encountered at university level. SAILIS newsletter, 7 (8) : 8.
- STUBBS, K (1981). University libraries : standards and statistics. College and research libraries, 42 (6) : 527-538.
- SUCHMAN, E.A (1967). Evaluative research : principles and practice in public service & social action programs. New York : Russel Sage Foundation.
- SUGRANES, M.R. & NEAL, J.A (1983). Evaluation of a self-paced bibliographic instruction course. College and research libraries, 44 (6) : 444-57.

- SWANEPOEL, A.J. & BOON, J.A (1986). 'n Universiteitsbiblioteek se rol met betrekking tot dienslewering aan die gemeenskap-uitgangspunte en riglyne. South African journal of library and information science, 54 (2) : 86-89.
- TAGLIACOZZO, R., ROSENBERG, L. & KOCHEN, M (1970). Access and recognition : from users data to catalogue entries. Journal of documentation 26 : 230-49.
- TALMADGE, R.L. & KIDMAN, R.L (1962). Library service to urban university stuents (part-time, working, commuting). Library trends, 10 (4) : 513-28.
- TANZER, T.J (1977). Training students to use the library. IATUL, 9 : 187-89.
- TASSIA, M (1979). Its not just a game. School library journal, 25 (7) : 105-7.
- TAUBER, M.F., COOK, C.D. & LOGSDON, R.H (1958). The Columbia university libraries: a report on present and future needs. New York : Columbia University Press.
- TAUBER, J.F. & STEPHENS, I.R eds. (1967). Library surveys. New York : Columbia University Press.
- TAYLOR, A.R. (1978). The changing fortunes of academic libraries. Scholarly Publishing, 10 (1) : 45-53.
- (1976). A librarian's handbook. London : Library Association.
- (1978). User education and the role of education. Unesco bulletin of libraries, 32 (4) : 252-59.
- TAYLOR, R.S. (1967). Question-negotiation and information-seeking in libraries. Bethlehem (Pa.) : Lehigh University Center for the Information Sciences.
- (1972). The making of a library : the academic library in transition. New York : Becker & Hayes.
- TAYLOR, S.J. & BOGDAN, R (1984). Introduction to qualitative research methods : the search for meanings. 2nd ed. New York : Wiley.
- TENNESSEE UNIVERSITY LIBRARY (1967). The library in the university of Tennessee library lectures, 1949-1966. Hamden (Conn.) : Shoe String Press.
- THAIRU, R.W (1978). The role of library in education. Maktaba, 5 (1) : 28-37.
- THOMAS, L.E (1978). Tri-University libraries. Canadian library journal, 35 : 27-33.

- THOMAS, S.E (1985). Collection development at the Center for Research Libraries : policy and practice. College and reserach libraries, 46 (3) : 230-35.
- THOMPSON, J (1970). An introduction to university library administration. London : Bingley.
- ed. (1980). University library history : an international review. London : Bingley.
- (1977). University libraries. In : WHATLEY H.A ed. British librarianship and information science 1971-1975. London : Library Association.
- THOMPSON, V (1971). Massey University library reserve book issues, 1970. Australian academic and research libraries, 2: 172-3.
- THOMPSON, S.K (1970). Interlibrary loan procedure manual. Chicago : American Library Association.
- THOMSON COMMISSION (1910). see UNION OF SOUTH AFRICA (1910).
- TIDMARSH, M.N (1968). Instruction in the use of academic libraries. In : SAUNDERS, W.L ed. University and research library studies. Oxford : Pergamon, p. 39-83.
- TREHAN, G.L (1969). Administration and organisation of college libraries in India. Delhi : Sterling publishers.
- TRUESWELL, R.W (1969). Some behavioral patterns of library users : the 80/20 rule. Wilson library bulletin, 43 (5) : 458-61.
- TUCKER, J.M (1980). User education in academic libraries : a century in retrospect. Library trends, 29 (1) : 9-27.
- TUCKER, P.E (1977). New university libraries. In : WHATLEY, H.A ed. British librarianship and information science 1971-75. London : Library Association. p. 373-83.
- TURNER, S.J (1977). A formula for estimating collection use. College and research libraries, 38 (6) : 509-13.
- U.C.T. Library Committee collection development sub-committee. Working paper (15 September 1987).
- Library Committee. Library endowment fund, (undated).
- U.G.C. see UNIVERSITY GRANTS COMMITTEE.
- UGLI newsletter, (1985). no 32. (December).
- UGLI newsletter, (1981). no. 18 (January).
- UGONNA, J.A (1983). The Nigerian undergraduate and the undergraduate library concept : a facility for manpower development. Libri, 33 (2) : 126-35.

- UNION OF SOUTH AFRICA (1910). Commission appointed to inquire into and report upon matters concerning higher education in the Union. Report. Pretoria : Government Printing and Stationery Office. (U.G. 48/1911). Chairman : W. Thomson.
- UNION OF SOUTH AFRICA (1914). University Commission. Report... to both Houses of Parliament ... Cape Town, Cape Times Limited, Government Printers. (U.G. 42/1914). Chairman : P.M. Laurence.
- UNION OF SOUTH AFRICA (1928). University Commission. Report Pretoria : Government Printing and Stationery Office (U.G. 33/1928). Chairman : J.G.P. van der Horst.
- UNION OF SOUTH AFRICA (1933). Committee of enquiry into subsidies to universities, university colleges, and technical colleges. Report. Pretoria : Government Printer. (U.G. 8/1934). Chairman : J.A. Adamson.
- UNION OF SOUTH AFRICA (1951). Commission of enquiry into university finances and salaries. Report. Chairman : J.E. Holloway.
- UNISA (1986). Average cost of books per year list. (Unpublished).
- UNIVERSITY GRANTS COMMITTEE. Memorandum of the committee on libraries. (February) HMSO, 1964.
- UNIVERSITY GRANTS COMMITTEE. Report of the Committee on Libraries. (Chairman Dr. T. Parry). HMSO, 1967.
- VAN DER HORST COMMISSION (1928). see UNION OF SOUTH AFRICA (1928).
- VAUGHAN, A (1982). Standards for British libraries. Library trends, 31 (1) : 155-171.
- VEANER, A.B (1985). 1985 to 1995 : the next decade in academic librarianship, part I. College and research libraries, 46 (3) : 209-29.
- (1985). 1985 to 1995 : the next decade in academic librarianship, Part II. College and research libraries, 46 (4) : 295-308.
- VEIT, F (1975). The community college library. Westport (Conn.) : Greenwood Press.
- (1976). Library service to college students. Library trends, 25 (1) : 361-78.
- VENTER, R (1978). South African post-secondary education information system : introductory manual (SAPSE 151 Manual) Rev. ed. Pretoria : Department of National Education. Universities Branch, (Report SAPSE 001).
- VENTER, R.H (1982). see SOUTH AFRICA (Republic) (1982).



- VOIGT, M.J (1970). The undergraduate library : the collection and its selection. San Diego : California University Library.
- (1975). Acquisition rates in university libraries. College and research libraries, 36 (4) : 263-71.
- VOIGT, M.J (1978). The undergraduate library : the collection and its selection. In : Wilkinson, B.R. ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 247-61.
- (1979). Circulation studies cannot reflect research use. Journal of academic librarianship, 5 (2) : 66.
- VOGEL, J.T (1972). Critical overview of the evaluation of library instruction. Drexel library quarterly, 8 (3) : 315-23.
- VOSPER, R (1964). European university libraries : current status and development. Library trends, vol. 12, no. 4, p. 474-623.
- VUTURO, R (1977). Beyond the library tour : those who can must teach. Wilson library bulletin, 51 (a) : 736-40.
- WAGMAN, F.H (1956). The case for the separate undergraduate library. College and research libraries, 17 (2) : 150-55.
- (1959). The undergraduate library at the university of Michigan. College and research libraries, 20 : 179-88.
- (1978). The case for the undergraduate library. In : Wilkinson, B.R. ed. Reader in undergraduate library. Englewood (Colo.) : Information Handling Services, p. 109-16.
- WALLENIOUS, A.B ed. (1971). Libraries in east Africa. Uppsala : Scandinavian Institute for African Studies.
- WALKER, G., GREENFIELD, J., FOX, J. & SIMONOFF, J.S (1985). The Yale survey : a large-scale study of book deterioration in the Yale University Library. College and research libraries, (2) : 111-32.
- WALSH, R.R (1969). Branch library planning in universities. Library trends, 18 (2) : 210-22.
- WATSTEIN, S.B (1983). Book mutilation : an unwelcome by-product of electronic security systems. Library & archival security, 5 : 11-33.
- WATTS, T.D (1983). A brief for centralized library collections. Journal of academic librarianship, 9 (4) : 196-7.
- WAYMAN, S.G (1984). The international student in the academic library. Journal of academic librarianship. 9 (6) : 336-41.
- WEAVER-MEYERS, P., ALDRICH, D. & SEAL, R.A (1985). Circulation desk operations : costing and management data. College and research libraries, 46 (5) : 418-31.

- WEBER, D.C (1969). A contribution toward planning university library buildings. Library trends, 18 (2) : 107-270.
- WEBSTER, D.E (1977). Improving library performance : quantitative approaches to library planning. IATUL, 9 : 17-28.
- WELLS, A.R (1973). Another look at centralisation and decentralisation of university libraries. Libra, 8 : 26-35.
- WEKRING, R.h (1980). Evaluating bibliographic education. Library trends, 29 (1) : 153-72.
- WHATLEY, H.A ed. (1977). British librarianship and information sciences 1971-75. London : Library Association.
- WHITE, L.W (1968). University of Illinois award winning undergraduate library. Illinois libraries, 50 : 1042-46.
- WHITE, H.S (1985). Reactions to 'defining the academic librarian'. College and research libraries, 46 (6) : 469-77.
- (1985). Academic libraries, online searching, and turf: a symposium. Journal of academic librarianship, 11 (5) : 268-9.
- WHITLATCH, J.B (1983). Library use patterns among full- and part-time faculty and students. College and research libraries, 44 : 141-42.
- WHYTE, J.P (1977). Direct service to readers. In : Bryan, H & Greenwood, G. eds. Design for diversity. St Lucia : University of Queensland Press, p. 283-312.
- WILLCOCKS, J (1986). University of the Witwatersrand overnight library computerized circulation system. South African journal of library and information science, 54 (3) : 126-131.
- WILKINSON, B.R (1970). The undergraduate library's public service record : reference services. San Diego : California University, Library. (Eric reports).
- (1971). The undergraduate library : a screaming success. Library journal, 96 (9) : 1567-71.
- (1972). Reference services for undergraduate students : four case studies. (n.p.) : Scarecrow.
- (1978). Reader in undergraduate libraries. Englewood (Colo.): Information Handling Services.
- WILLIAMS, E E (1949). The selection of books for Lamont. Harvard library bulletin, 3 : 386-394.
- (1978). The selection of books for Lamont. Reprinted in : Wilkinson, B.R. ed. Reader in undergraduate libraries. Englewood (Colo.) : Information Handling Services, p. 63-70.

- WILLIAMS, M & DAVIS, E.B (1979). Evaluation of PLATO library instruction lessons. Journal of academic librarianship, 5 (1) : 14-19.
- WILSON J. H (1977). Librarians-introverted or integrated. Australian academic research libraries, vol. 8, no. 2, p. 87-93.
- WILSON, T.D (1977). The investigation of information use and users' needs as a basis for training programmes. International forum of information documentation, 4 (2) : 25-9.
- (1978). Learning at a distance and library use : Open University students and libraries. Libri, 28 (4) 270-82.
- (1981). On user studies and information needs. Journal of documentation, 37 : 3-15.
- WINGATE, H.W (1978). The undergraduate library : is it obsolete? College and research libraries. 39 (1) : 29-33.
- WOELFLIN, L (1972). Instruction in the undergraduate library-college. Learning today, 5 (1) 40-48.
- WOOD, D.N (1971). User studies a review of the literature from 1966 to 1970. Aslib proceedings, 23 (1) : 11-13.
- WOOD, R.J (1984). The impact of a library research course on students at Slippery Rock University. Journal of academic librarianship, 10 (5) : 278-84.
- WYNAR, B.S (1967). Introduction to bibliography and reference work. 4th ed. New York : Libraries Unlimited.
- YOUNG, P.V (1964). Scientific social surveys and research. Englewood Cliffs : Prentice Hall.
- ZAAIMAN, Z.B (1986). An active role for libraries in development. SAILIS newsletter, 6 (10) : 2-3.
- ZWEIZIG, D.L. Measuring library use. Drexel library quarterly, 13 (3) : 3-15.

#### PERSONAL COMMUNICATION:

- DE VILLIERS, J.H.G (1987). University Planner, University of Fort Hare.